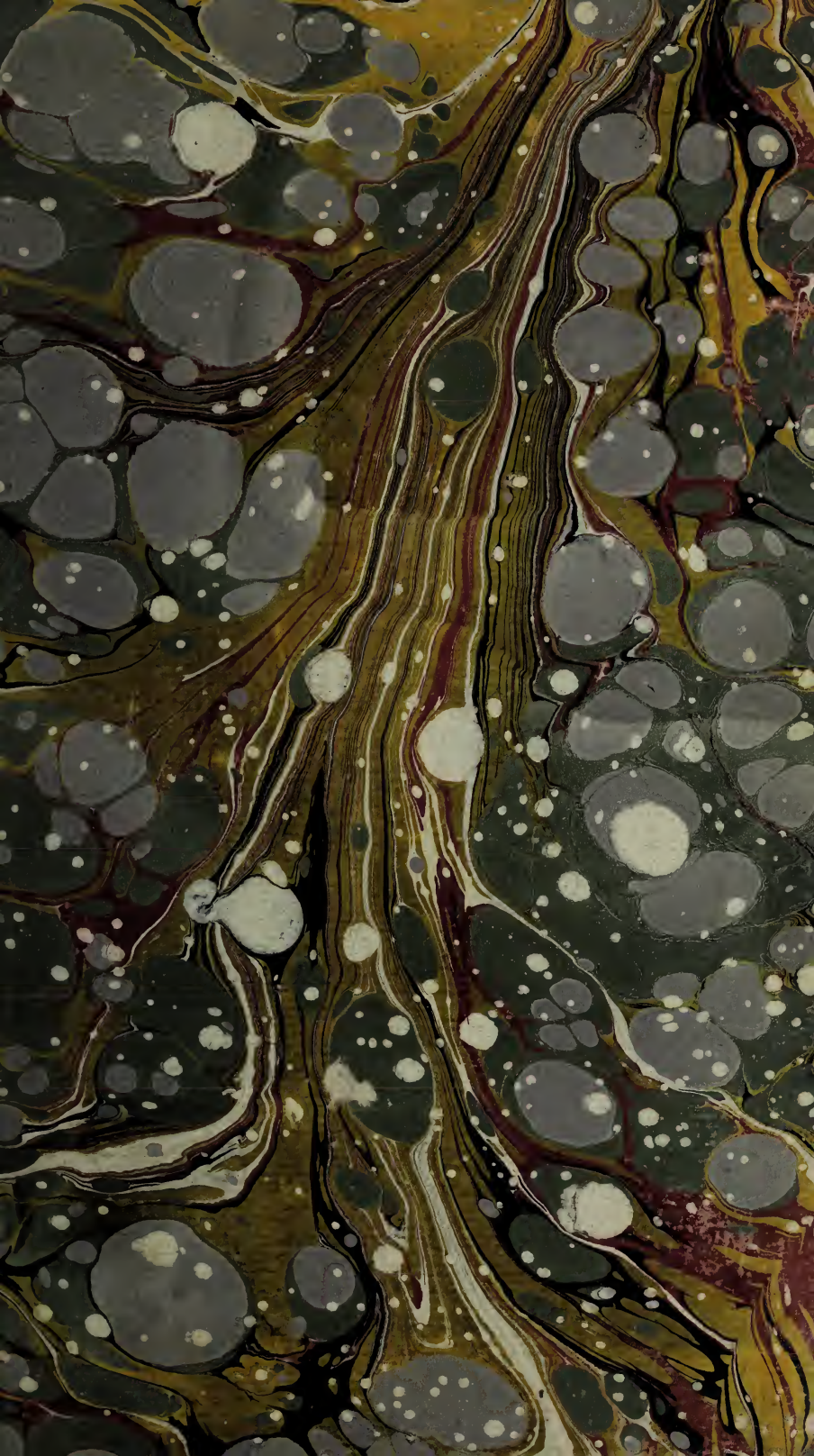




John Cockley, Lettcom. W.D.F.F.S.
London.

Dum Spiros Spes.

1745.



48008/B





VIRO CELEBERRIMO
THOMÆ PENNANT
ARMIGERO,
NATURÆ INDEFESSO INDAGATORI,
CUJUS
STUDIO ET ACUMINE
PHYSICIS
TUM EXTERIS
TUM PRÆCIPUE NOSTRATIBUS
PROVECTIOR, ORNATIOR, LOCUPLETIOR,
TRADITA EST SCIENTIA,
QUARTUM HUNC
NATURÆ VIVARII
FASCICULUM,
D. D. D.

GEORGIUS SHAW,
FREDERICUS P. NODDER.

TO
THOMAS PENNANT
ESQUIRE,
FROM WHOSE LITERARY LABOURS
NATURAL HISTORY IN GENERAL,
AND THAT OF
GREAT BRITAIN IN PARTICULAR,
HAS RECEIVED SUCH AMPLE IMPROVEMENTS,
THIS FOURTH VOLUME
OF THE
NATURALIST'S MISCELLANY
IS
WITH MUCH RESPECT INSCRIBED,
BY
HIS MOST OBEDIENT HUMBLE SERVANTS,
GEORGE SHAW,
FREDERICK P. NODDER.



PIPRA PUNCTATA.



CHARACTER GENERICUS.

Rostrum capite brevius, basi subtrigonum, integerrimum, apice incurvum.

Pedes gressorii.

Lin. Syst. Nat. p. 338.

CHARACTER SPECIFICUS.

PIPRA grisea, fusco undulata, vertice alisque nigris, albo punctatis, tectricibus caudæ rubris.

Femina? minus vivida, capite maculis flavescentibus.

Plura de hac avicula, quam plene describit character specificus, dicere supervacaneum habui, nisi quod species prius apud nos incognita, a Nova Hollandia nuperrime advenerit. De modo vivendi nihil est quod proferre possum; de hoc enim prorsus filetur.

THE
SPECKLED MANAKIN.



GENERIC CHARACTER.

Bill shorter than the head, somewhat triangular
at the base, bent at the tip.

Feet gressorial.

SPECIFIC CHARACTER.

GREYISH-BROWN MANAKIN, undulated
with dusky, the top of the head and the
wings black speckled with white, the coverts
of the tail red.

*The supposed female is less vivid in colour, and the
head is spotted with yellowish.*

Of this bird, which is fully described by its specific
character, it is unnecessary to say more than that it is a
new species; having been lately received from New
Holland, but unaccompanied by any particulars rela-
tive to its manner of life.



London. Published Augst 1st 1792 by F. de Voluer & Co. No. 5 Brewer Street.

MEDUSA INFUNDIBULUM.



CHARACTER GENERICUS.

Corpus gelatinosum, orbiculatum (plerisque) de-
depressum.

Os subtus centrale.

CHARACTER SPECIFICUS, &c.

MEDUSA OVATA, costis ciliatis novem.

Gmel. Syst. Nat. p. 3152.

VOLVOX BEROE.

Lin. Syst. Nat. p. 1324.

In Insulæ Jamaicæ historia formosam hanc Medusæ speciem primus notasse videtur Dominus Browne; cujus descriptionem cum lectoribus lubentissime communicavi.

Forma est ovata, obtuse aëtangula, cava, extremitate majore aperta, pellucida, substantia firma et gelata. Facillime se contrahit et dilatat; inter natandum semper expansa. Radii longitudinales validiores ad verticem, unde quasi a stella pulchra et oblonga affurgunt, ad marginem sensim attenuati. Singuli autem serie tentaculorum gracilium breviumque ornantur, quæ hinc inde

inde ad arbitrium animalis a summo ad imum celerrime moventur. Membrorum mollium et tenellorum quasi undatim se invicem assequi properantium incitati cursus, variique et sole percussi colores nequeunt facile verbis exprimi. Circa insulas Jamaicæ occiduas frequenter spectantur hæc animalia, raro tres pollices cum dimidio pollicis longitudine superantia, duosque vel duos cum dimidio in diametro.



THE FUNNEL MEDUSA.



GENERIC CHARACTER.

Body gelatinous, orbicular, in most species depressed.

Mouth beneath, central.

SPECIFIC CHARACTER.

OVATE MEDUSA with (commonly) nine ciliated ribs.

The elegant species of Medusa here represented, appears to have been first observed by Dr. Patrick Browne, who, in his History of Jamaica, has described it in the following words:

“ This beautiful creature is of an oval form, obtusely octangular, hollow, open at the larger extremity, transparent, and of a firm gelatinous consistence. It contracts and widens with great facility, but is always open and expanded when it swims or moves. The longitudinal radii are strongest at the crown or smaller extremity, where they rise from a very beautiful oblong star, and diminish gradually from thence to the margin: but each of them is furnished with a single series of short, delicate, slender appendixes or limbs, that move
with

with great celerity either the one way or the other, as the creature pleases to direct its flexions, and in a regular accelerated succession from the top to the margin. It is impossible to express the liveliness of the motions of these delicate organs, or the beautiful variety of colours that rise from them while they play to and fro in the rays of the sun; nor is it easy to express the speed and regularity with which the motions succeed each other from one end of the rays to the other."

These animals are frequently seen about the western islands of Jamaica: they seldom exceed three inches and a half in length, or two and a half in the largest transverse diameter.

PAPILIO NESTOR.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato-capitatae.

Alæ (sedentis) erectæ sursumque conniventes.
(*Volatu* diurno.)

Lin. Syst. Nat. p. 744.

CHARACTER SPECIFICUS, &c.

PAPILIO alis dentatis supra fuscis albo maculatis discoque cæruleo, subtus ocellis tribus quatuorque.

Fabr. Spec. Inf. 2. p. 24.

PAPILIO alis dentatis: supra fuscis maculis discoque cæruleis, subtus ocellis tribus binisque.

Lin. Syst. Nat. p. 752.

Eq. Achiv.

Papilionem Achillem in hoc opere jam descriptum magnitudine fere æquat, forma eleganti superat Papilio Nestor. Alarum oræ profunde denticulatae sunt, mediaque pars, seu discus es lucidissime cæruleus; limbi
autem

autem sunt nigri, maculis lunatis albis et cærulescentibus, ut et figura demonstrat, notati. Americam Australem incolit papilio Nestor. Inferior superficies est fusca, maculas habens ocellatas, marginibus centrisque albidis.

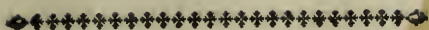






London, published by J. P. A. Walker & Co. No. 1, Broad Street.

N E S T O R.



GENERIC CHARACTER.

Antennæ or *Horns* thickening towards the upper part, and generally terminating in a knob, or club-shaped tip.

Wings (when sitting) erect, and meeting upwards.
(*Flight* diurnal.)

SPECIFIC CHARACTER, &c.

BUTTERFLY with indented blackish wings with bright-blue disk and white spots; the under surface brown, with larger and smaller ocellated spots.

Mer. Sur. t. 9.

Cram. 2. t. 19. f. A. B.

The *Papilio Nestor* is nearly equal in size to the *P. Achilles*, which has already been figured in the present work; but is more elegant in shape, the wings being deeply indented or scalloped round the edges. The chief or middle part of all the wings is of the richest brilliant blue: the edges are black marked with
lunated

lunated spots of white and blueish, as represented in the figure. It is a native of South America. The lower surface is brown, with some ocellated spots with whitish margins and centres.

MOTACILLA HIRUNDINACEA.



CHARACTER GENERICUS.

Rostrum subulatum, rectum : mandibulis subæqualibus.

Nares obovatæ

Lingua lacero-emarginata.

Lin. Syst. Nat. p. 328.

CHARACTER SPECIFICUS.

MOTACILLA ? chalybeo-nigra, gula pectore
crissoque phoeniceis, abdomine niveo fascia
longitudinali nigra.

Speciem hanc, Novæ Hollandiæ incolam, in Angliam non ita pridem illatam, ignorasse videntur ornithologi. Vultu est paululum ambiguo, et dubitari forsan possit an hirundini potius quam motacillæ sit similior. Cum vero prorsus sit impossibile avis penitus novæ (præsertim si ipsum specimen vel tantillum læsum sit) verum et certum locum in systemate designare; nomen igitur triviale dedi, quod admoneat ulterius quærendum esse, si detur aliquando occasio accuratius examinandi.



London, Published Sep^r 16, 1799, by F. & J. Nodder in St. Pauls Church-yard, Brewer Street.

THE
SWALLOW WARBLER.



GENERIC CHARACTER.

Bill fubulated (or owl-shaped ;) ftrait ; the mandibles nearly equal.

Nostrils nearly oval.

Tongue jagged, or lacerated towards the tip.

SPECIFIC CHARACTER.

BLACK WARBLER? with a glos of fteel-blue, throat breaft and vent crimfon, abdomen white with a longitudinal band of black.

This is a fpecies hitherto unknown to ornithologifts : it is an inhabitant of New Holland, and was very lately brought into this kingdom. Its general appearance feems to be fomewhat doubtful, and it may be thought perhaps to make as near an approach to the genus *Hirundo* as to that of *Motacilla*. As it is impoffible, however, in new fpecies, efpecially when the fpecimens have received the fmalleft injury, to afcertain with perfect precision their true place in fyftem, I have therefore

therefore applied to this bird a trivial name which may serve as a hint for farther inquiry, should opportunity offer, of examining the species in a more accurate manner.

GRYLLUS LAURIFOLIUS.



CHARACTER GENERICUS.

Caput inflexum, maxillosum, palpis instructum.

Antennæ setaceæ, seu filiformes.

Alæ quatuor, deflexæ, convolutæ: inferiores plicatæ.

Pedes postici saltatorii. *Ungues* ubique bini.

Lin. Syst. Nat. p. 693.

CHARACTER SPECIFICUS, &c.

GRYLLUS thorace subtetragono lævi trilobo,
alis lanceolatis elytro obtusiore longioribus.

Lin. Syst. Nat. p. 695.

LOCUSTA thorace tetragono lævi, alis lanceolatis elytro longioribus.

Fab. spec. inf. 1. p. 356.

LOCUSTA maxima viridis, alis latissimis.

Sloan. jam. 2. p. 201. t. 236. f. 1.

Nomen inde adeptum est hoc insectum quod alarum thecæ seu elytra Lauri foliis simillima sint. In generibus Grylli et Mantis multis speciebus facies est quasi foliata;

foliata; quod voluisse quodammodo videtur Natura, ut in arborum coma versantes ab avium aliorumque hostium rapacitate fiant securiores. Reperitur hæc grylli species in America.



THE BAY-LEAVED LOCUST.



GENERIC CHARACTER.

Head inflected, armed with jaws, and furnished with palpi or feelers.

Antennæ either setaceous or filiform.

Wings four, deflected, convolute; the inferior ones plaited.

Hind-feet formed for leaping. Claws on all the feet double.

SPECIFIC CHARACTER, &c.

LOCUST with smooth and somewhat tetragonal thorax, and wings (commonly) rather longer than the wing-sheaths.

THE BAY-LEAVED LOCUST.

This insect has obtained its name from the strong general resemblance which the upper or outer wings bear to the leaves of the Bay tree. Several species in the genera of *Gryllus* and *Mantis* are highly remarkable for this leaf-like appearance, which seems intended in some measure as a security to the animals from

from the attacks of birds and other creatures while seated amongst the foliage of the trees which they frequent. This species is a native of many parts of America.

TRIGLA CATAPHRACTA.



CHARACTER GENERICUS.

Caput loricatum lineis scabris.

Membr: branch: radiis septem.

Digiti liberi ante pinnas pectorales.

CHARACTER SPECIFICUS, &c.

TRIGLA digitis geminis, rostro furcato elongato,
corpore octagono.

Lin. Syst. Nat. p. 496.

TRIGLA cirris plurimis, corpore octagono.

Art. gen. 46. syn. 75.

Piscium loricatorum seu *cataphractorum*, ut dicuntur, vix elegantior est species quam quæ in tabula depingitur. Unica est e Triglis quæ hoc tegmine defenditur, cum reliquis omnibus hætenus cognitis squamæ parvulæ obductæ sint. Caput mire conformatum: rostrum enim late bifurcum, apicibus obtusis; quod vel solum hunc piscem fatis distinguat a Cotto cataphracto aliisque nonnullis, cum quibus fortasse eum spectator

C

incuri-

incuriosus, notisque quæ genus discriminant parum
versatus, posset confundere. Color albido-fusco-pallet.
Longa est, ut plurimum, Trigla cataphracta circiter
sex uncias. In mari nascitur Mediterraneo.



THE MAILED GURNARD.



GENERIC CHARACTER.

Head covered with long plates.

Branchiostegous membrane with seven rays.

Appendages situated before the pectoral fins.

SPECIFIC CHARACTER, &c.

GURNARD with two pectoral appendages, elongated forked snout, and mailed body.

THE MAILED GURNARD.

Amongst the mailed or cataphracted fish, the species here represented is one of the most elegant. It is the only species of *Trigla* which is distinguished by this peculiar kind of coating; all the others yet known being covered with small scales. The form of the head is singular; the snout or upper jaw being widely bifurcated, with the divisions or processes obtuse. This forked appearance of the head is alone sufficient to distinguish this fish from the *Cottus cataphractus* and some others, with which an incurious spectator, not attending

ing to its generic characters, might perhaps be in danger of confounding it. Its colour is a very pale whitish brown, and its usual length about six inches. It is a native of the Mediterranean sea.

CRAX ALECTOR.



CHARACTER GENERICUS.

Rostrum basi cera obductum in utraque mandibula.

Pennæ caput tegentes revolutæ.

Lin. Syst. Nat. p. 269.

CHARACTER SPECIFICUS, &c.

CRAX cera flava, corpore nigro, ventre albo.

Lin. Syst. Nat. p. 269.

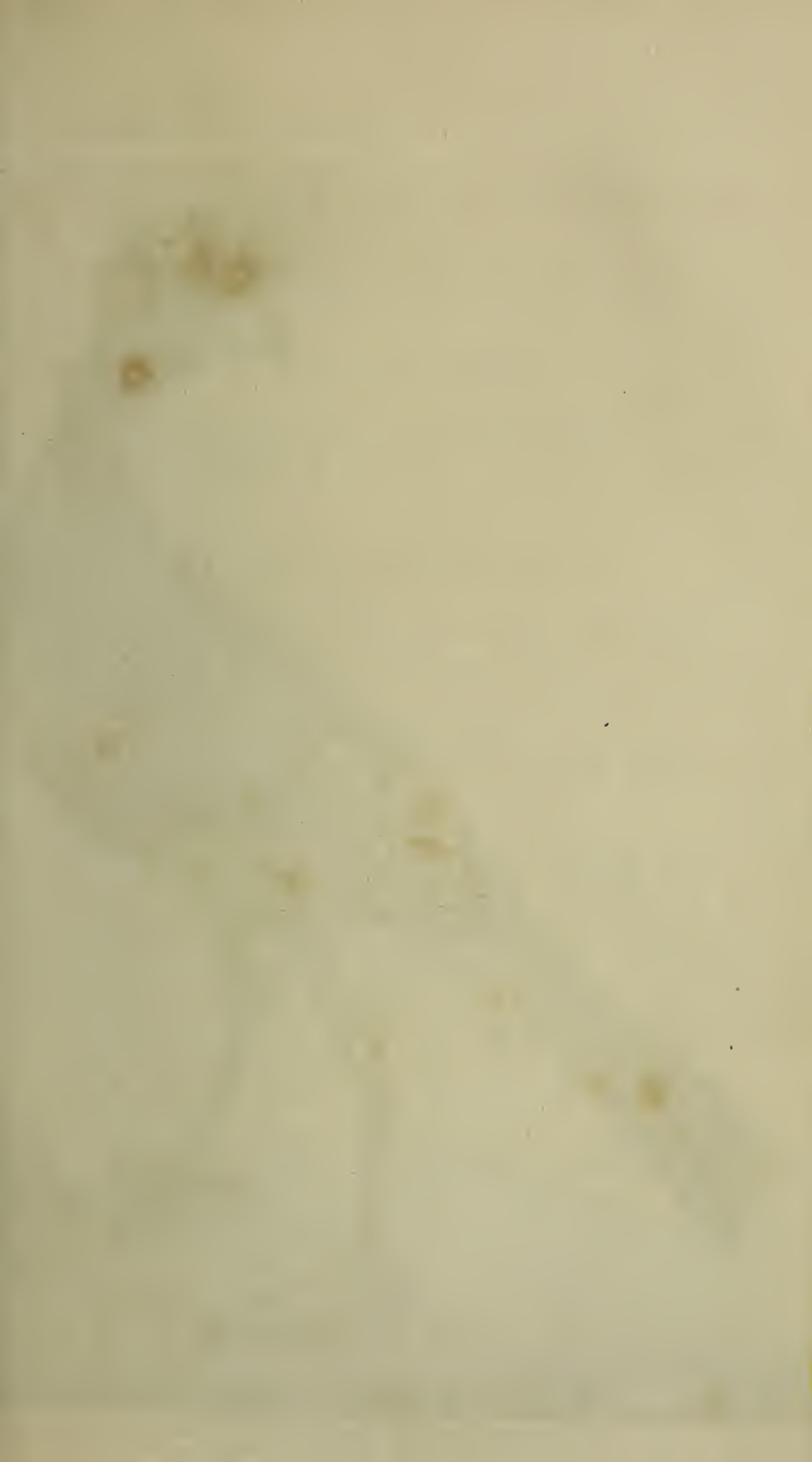
GALLUS INDICUS.

Sloan. Jam. 2. p. 302. t. 260.

MITUPORANGA.

Raii. Syn. p. 52. 6.

Crax Alector e maximis est gallinacei generis. In America Australi abundat, caroque ejus in deliciis habetur. Fit cicur nullo fere negotio. Coloribus nonnunquam variat. Femina fusco-ferruginea est.





THE
COMMON CURASSOW.



GENERIC CHARACTER.

Bill on both mandibles covered with a cere.

Feathers on the head revolute.

SPECIFIC CHARACTER, &c.

BLACK CURASSOW with yellow cere; the lower part of the abdomen white.

LE HOCCO DE LA GUIANE.

Briss. orn. 1. p. 298. pl. 29.

MITUPORANGA.

Will. orn. p. 161. pl. 28.

The Crax Alektor or black Curassow is one of the largest of the gallinaceous tribe. It is common in South America, where it is much esteemed as an article of food. It is easily domesticated, and is sometimes subject to vary in colour. The female is of a ferruginous brown.

MADREPORA CEREBRUM.



CHARACTER GENERICUS.

Animal Medusa.

Corallium cavitatibus lamelloso-stellatis.

Lin. Syst. Nat. p. 1272.

CHARACTER SPECIFICUS, &c.

MADREPORA subglobosa, anfractibus longissimis tortuosis, prominentiis plano-obtusis.

MADREPORA composita, labyrinthiformis hemisphærica, lamellis duplicato ordine integris obtusis, sinibus æqualibus.

Hort. Cliff. 489.

MADREPORA MEANDRITES.

Pall. el. zooph. p. 292. n. 171.

CORALLIUM CEREBRI FACIE.

Petiv. gaz. t. 68. n. 11.

Varia est hujus Madreporæ magnitudo. Interdum paucas tantum uncias, interdum duos pedes diametro superat. Forma illi est fere sphærica, perfectior tamen in certis speciminibus. Ob similitudinem quam habet superficies

superficies parti externæ corticatæ seu cinericiæ (ut vocatur) in quadrupedum cerebro, nomen illi inde commune *Lapis cerebri* inditum est. Alia est species, huic de qua jam loquimur simillima, quamque primo visu eandem putares; et sane dubitari possit sitne hujus varietas; differt enim tantum in gyris prominentibus, qui compressiores et acutiores, non complanati. Notandum est Madreporis rotundatis non raro inesse duo vel tria foramina, diametri non exiguæ, ad cylindros in ipso corallio terebratos ducentia. Non videntur hujusmodi foramina naturæ opus esse, sed aliorum animalium, Terebellarum nempe (ut vocantur) quæ corallium perforant, interdumque in imis hisce tubis quasi in cubile jacentes reperiuntur.



London Published Oct. 8. 1791 by F. & J. Noell & Co. 15. St. Dunstons Street.

THE BRAIN MADREPORE.



GENERIC CHARACTER.

Animal resembling a Medusa.

Coral marked with lamellar striated cavities.

SPECIFIC CHARACTER, &c.

NEARLY GLOBULAR MADREPORE, with
very long tortuous undulations, the prominent ones terminating flattish.

THE GREAT BRAIN-STONE.

The Madreporé represented on this plate is found of various sizes, from a few inches to upwards of two feet in diameter. Its form is nearly globular, but much more accurately so in some specimens than in others. From the general resemblance which the undulated surface bears to the cortical or exterior part of the brain in quadrupeds, it has obtained its common title of Brain-stone. There is another species which in size and general appearance so very nearly resembles the present, that on a cursory view it would readily pass for the same; and indeed can scarce be regarded in any other

other light than that of a variety. The difference consists in the prominent undulations, which in that species are of a more compressed form, so as to rise with a sharp edge; not flattened as in the present species. I should observe that in the globular Madreporæ are often, and indeed generally, seen one or two or more round orifices of considerable diameter, and which lead to cylindrical perforations in the body of the coral. These holes do not seem so much owing to the natural structure of the Madreporæ itself, as to the operation of other animals, such as *Terebellæ*, which are sometimes found imbedded in these tubes.

MANTIS SICCIFOLIA.



CHARACTER GENERICUS.

Caput nutans maxillosum, palpis instructum.

Antennæ (plerisque) setaceæ.

Alæ quatuor, membranaceæ, (plerisque) convolutæ; inferiores plicatæ.

Pedes antici compressi, subtus ferrato-denticulati, armati ungue solitario et digito setaceo laterali articulado. *Postici* quatuor læves, gressorii.

Thorax linearis, elongatus, angustatus.

Lin. Syst. Nat. p. 689.

CHARACTER SPECIFICUS, &c.

MANTIS thorace denticulato, femoribus ovatis membranaceis.

Lin. Syst. Nat. p. 689.

Roef. inf. 2. t. 17. fig. 45.

Edw. av. t. 258.

Omnibus Mantin hanc obiter intuentibus, præcipue si alarum thecæ seu elytra claudantur, in mentem venit folii mortui exsiccatique similitudo. Verisimile est vivæ virefcere potius colores quam subfufcari: quæ tamen in Europam illata sunt specimina respondent tabulæ. Cum

ei alarum inferiorum rudimenta tantum sint, non impossibile est quin revera sit larva speciei cujusdam hactenus non plene cognitæ et descriptæ; ni potius e numero sit illorum insectorum quæ constanti naturæ consilio alis carent, quorum multa sunt non solum in classe *Hemiptera* sed et *Coleoptera*; in certis scilicet *Cimicis*, *Carabi*, aliorumque speciebus.



London, Published the 1st of 92 by J. B. Seabrook, 115 Piccadilly.

THE DRY LEAF MANTIS.



GENERIC CHARACTER.

Head unsteady; *Mouth* armed with jaws, and furnished with palpi.

Antennæ setaceous, (some few species excepted.)

Wings four, membranaceous, in most species convoluted: the lower ones (generally) plicated.

Feet anterior compressed, serrated beneath, armed with a lateral solitary claw and jointed process; *posterior* four smooth, formed for walking.

Thorax (in most species) elongated and narrowed.

SPECIFIC CHARACTER, &c.

MANTIS with denticulated thorax and ovate membranaceous thighs.

THE WALKING LEAF.

Edw. pl. 258.

The very remarkable shape and colour of this insect uniformly suggest the idea of a dried or withered leaf, which the animal, when its wings are closed, so much

much resembles, that, on a cursory view, it might easily be mistaken for such. It is not improbable that in a recent state the colour may be rather green than brownish: the specimens however which are brought into Europe are generally of the tinge represented in the plate. It is remarkable that this curious animal has merely the rudiments of under or lower wings. It is therefore not improbable that it may in reality be the larva of some species not yet fully described; or else that it is a species which is naturally apterous; a circumstance of which several instances occur, not only in the class *Hemiptera*, but also in that of *Coleoptera*; as is sufficiently proved in some species of *Cimex*, *Carabus*, and others.

TANTALUS RUBER.



CHARACTER GENERICUS.

Rostrum longum, subulatum, teretiusculum, sub-
arcuatum.

Facies ultra oculos nuda.

Lingua brevis, lata.

Saccus jugularis nudus.

Nares ovatae.

Pedes tetradactyli, basi palmati.

Lin. Syst. Nat. p. 240.

CHARACTER SPECIFICUS, &c.

TANTALUS facie rostro pedibusque rubris, cor-
pore sanguineo, alarum apicibus nigris.

Lin. Syst. Nat. p. 241.

NUMENIUS brasiliensis coccineus.

Briss. av. 5. p. 344. t. 29. f. 1. 2.

NUMENIUS RUBER.

Catesb. Car. 1. p. 84. t. 84.

NUMENIUS INDICUS.

Clus. exot. 366.

Avium nitidissimarum parens orbis occiduus paucas
alit hac splendidiore, cui totus vestitus, exceptis remi-
gum longiorum apicibus, lætissime est coccineus. Ros-

E

trum

trum pedesque pallentes rubent. Varias licet Americæ partes incolat, in australioribus tamen frequentior est. Magnitudine Numenio communi fere æqualis est, eodemque propemodum utitur vivendi modo.





London, Published Nov. 1st 1791. by F. & J. Nodder 46th No. 15 Brewer Street.

THE
SCARLET IBIS.



GENERIC CHARACTER.

Bill long, thick at the base, incurvated.

Face, and sometimes the whole head, naked.

Nostrils linear.

Tongue short.

Toes connected at the base by a membrane.

Lath. Syn. 3. p. 104.

SPECIFIC CHARACTER, &c.

SCARLET IBIS with red beak and legs; the
wings tipped with black.

SCARLET IBIS.

Lath. Synops. 3. p. 106.

RED CURLEW.

Catesb. Car. 1. p. 84. pl. 84.

Amongst the brilliant birds of the western Continent few are more conspicuous than the present; the whole plumage of which, except the tips of the wings, is of the brightest and most vivid scarlet. The bill and legs are of a pale red. It is found in many parts of America, but is most common in the southern provinces. Its size is nearly that of a Curlew, which it also resembles in its manner of life.

GORDIUS AQUATICUS.



CHARACTER GENERICUS.

Corpus filiforme, æquale, læve.

Lin. Syst. Nat. p. 1075.

CHARACTER SPECIFICUS, &c.

GORDIUS pallidus extremitatibus nigris.

Lin. Syst. Nat. p. 1075.

SETA, s. vitulus aquaticus.

Aldr. inf. 720. t. 765.

GORDIUS SETA.

Müll. hist. verm. 1. 2. p. 30. n. 161.

SETA PALUSTRIS.

Planc. conch. app. c. 22. t. 5. f. F.

Vermis iste, setæ simillimus, qui Gordius vocatur, in aquis mollibus et stagnantibus præcipue cernitur, idque fere omni tempore, frequentius autem æstivo. Longus, ut plurimum, vix quatuor uncias, pertingit interdum ad quinque vel etiam sex. Color communis fusco-pallet, extremitatibus nigricantibus, vel saltem magis infuscatis reliquo corpore. Nomen Gordii, quod et generi commune, inde adeptus est, quia contorquere se et colligere solet

soleat quasi in nodum qui *Gordius* nuncupatur. Cui diu manserit convolutus, iterum in pristinam longitudinem gradatim se explicat. Interdum in aquis movetur more hirudinis, satis celeriter; alias cunctanter, gressuque quo nihil concipi potest languidius. Nomen vulgare *Hair-worm*, non ob formam solummodo datum est; sed quod eum revera ortum esse a seta quæ ab equo seu alio animali in aquas deciderat, olim crediderit indoctum vulgus, etiamnum erroris tenax. Si Gordius digitum morfu læserit, paronychiam non raro excitare dicitur: idque in Suecia subinde accidere a Linnæo memoratur fide non modo rusticorum, sed experimento viri eruditi, naturæ et veritatis studiosissimi. Possum quoque egomet testimonium proferre hominis fide dignissimi, qui mihi retulit, Gordium, quem incaute nuda manu ex aquis eripuit, extremum sibi digitum vulnerasse, indeque exortam esse paronychiam. An infit morfui peculiaris quædam irritatio, an ab alia qualibet punctura idem proveniret effectus, vix ausim dicere. Piaculum foret, si de Gordio locutus morbum nomine *Venæ Medinensis* cognitum filerem, qui oritur a Gordii specie quæ in calidioribus mundi regionibus (cum adhuc forte parvula sit) sub cutim irrepere dicitur, ibique in magnam crescere longitudinem, et difficillime extrahi, dolorem summum molestiamque excitans. Nec prætereundum est, gordii speciem, (ipsum fortasse vulgarem dum adhuc junior) in animalibus variis præter omnem expectationem inveniri; in scarabæis scilicet, erucis, aliisque insectis. Immo memini meipsum in cerebro Lacertæ aquaticæ Linnæi Gordios adeo exiguos observasse, ut cum microscopio accurate eos examinasset, unciaë millesimam partem vix superare viderentur.

Vitæ

Vitæ tenacissimus est Gordius vulgaris, et quamvis in aqua servatus quasi mortuus multas horas jaceat, postea tamen integrari videntur pristinae vires. Notandum est reperiri eum non modo in aqua sed interdum in ipsa terra; in hortis præcipue post pluviam, et in humo argillacea, in qua facillime et liberrime se movere solet.

THE
COMMON GORDIUS,
OR
HAIR-WORM.



GENERIC CHARACTER.

Body filiform, equal, smooth.

SPECIFIC CHARACTER, &c.

PALE-BROWN GORDIUS with dark extremities.

THE COMMON HAIR-WORM.

The Gordius aquaticus or common Hair-Worm is principally an inhabitant of soft stagnant waters, and may be found during the greatest part of the year, but is most plentiful in the summer months. It grows to the length of five or six inches, but is not very often seen of more than about four inches. Its most general colour is a palish brown, with the extremities blackish, or at least darker than the other parts. It has obtained the generic name of Gordius, from its having a habit of sometimes twisting itself into such peculiar contortions as to resemble a complicated or Gordian knot. In this state it often continues for a considerable space; and



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and then slowly disengages itself, and extends its body at full length. Sometimes it moves in the water with a pretty quick undulating motion like that of a leech; and at other times in the slowest and most languid manner imaginable. Its popular name of Hair-Worm was not given it from its form alone, but from an idea that it was produced from the hair of horses and other animals which had been cast in the water: an opinion which is not even yet extinct amongst the vulgar. A remarkable circumstance relative to this animal is, that its bite, which it sometimes inflicts on being taken out of the water, has been known to produce the complaint called a whitlow. This is mentioned by Linnæus as a popular idea in Sweden, and which had been confirmed by the experience of a person of high reputation. I can also add the testimony of a gentleman of great veracity, who assured me that on having incautiously taken a Gordius out of the water, he was bit by it on the tip of his finger, and that in consequence of the bite a whitlow soon took place. Whether however there be really any thing peculiarly irritating in the bite of this worm, or whether a similar puncture caused by any other means might not produce the same effect, I cannot take upon me to determine.

It would be unpardonable on this subject to omit observing that the complaint called the Guinea-Worm, or Vena Medinensis, which sometimes happens in the warmer regions, is owing to a species of Gordius, which is said to insinuate itself (probably when very small) under the skin; where it grows to a great length; is productive of very troublesome symptoms, and is extremely difficult to extract. It is remarkable also that a species
of

of Gordius, perhaps the *Gordius aquaticus* in a very young state, occurs not unfrequently in animals in which one would least expect to find it; viz. in beetles of different sorts, in caterpillars, and other insects; and I once discovered in the brain of the smaller Water-Newt (*Lacerta aquatica*. Lin.) a number of microscopic Gordii so extremely minute as not to exceed the thousandth part of an inch in length. The *gordius aquaticus* is very tenacious of life, and after being kept a long time in a vessel of water, will sometimes appear perfectly motionless, and as if dead, for several hours; after which it will again assume its former vigour, and seem as healthy as at first. It should also be observed that the *Gordius* is not unfrequently found in earth as well as in water; especially in garden-ground after rain; and in clayey soils, in which it moves with great facility.

COLUBER CERASTES.



CHARACTER GENERICUS.

Scuta abdominalia.

Squamæ subcaudales.

Lin. Syst. Nat. p. 275.

CHARACTER SPECIFICUS, &c.

COLUBER cornutus fusco-ferrugineus, scutis abdominalibus 150, squamis subcaudalibus 25.

Bellon. it. 203.

Ellis. act. angl. 56. t. 14.

Coluber Cerastes, longus ut plurimum, pedem seu quindecim uncias, cornubus duobus incurvis supra oculos sitis et antrorsum spectantibus insignis est: quæ licet nequaquam similia sint quadrupedum cornubus, nec vulnus possint vel inferre vel defendere, augent tamen quodammodo odium quod contra totum genus serpentinum plerique solemus concipere, ipsiusque animalis vultum maligniorem et truculentiorem reddunt. In Africa innascitur Cerastes, præcipuamque sibi sedem delegit in desertis siccis et arenosis. In Ægypto? communis est, nec non in certis Nubiæ et Abyssiniæ partibus. In Syria quoque et Arabia plurimus. Ad viperæ vulgaris

vulgaris similitudinem non parum accedit Ceraſtes; ob morſum tamen magis eſt pertimeſcendus, quippe non ſolum eos qui incaute illum proculcant vulnerat, verum etiam magno et repentino impetu in prætereuntes e longinquo infilît. In multis Africæ regionibus, ſi qua fides peregrinatoribus digniſſimis, ſunt qui hos nec non alios venenatos ſerpentes medicamentis pollentibus hebetatos poſſunt faſcinare; quique rite parati nihil ab illis metuunt, omnigena licet provocatione irritentur. Lubenter crederem ſerpentes ita delenitos, telis venenatis, dentibus ſcilicet tubulatis prius fuiſſe privatos, ni Brucio, cui in itineribus Africanis plurimæ oblatae ſunt occaſiones veritatem eruendi, longe alia mens eſſet. “ Audacter poſſum affirmare me in urbe Cairo vidiſſe
“ (quod ſane alicui in quotidianum datur conſpectum,)
“ errantem quendam ab avium conditarum coemeteriis,
“ qui nudis manibus Ceraſtem e plurimis in imo dolio
“ jacentibus ſublato capiti impoſuit, pileoque com-
“ muni rubro cooperuit; poſtea in pectore fovit, et
“ quaſi monile circa collum ligavit. Simul ac vero
“ gallinæ admoveretur ipſiſſimus hic ſerpens, momordit
“ eam, illaque cito periit. Tandem homo, ut ſaſtigi-
“ um operi imponeret, ſerpentem collo prehenſum, a
“ cauda incipiens ſtatim abſque ullo ſaſtidii ſigno, ac
“ ſi quis daucum aut *celeri* devoravit.”

Addit Brucius omnes populos nigros in regno *Sennaar* perfecte hoc modo contra Ceraſtes armari, eoſque non ſolum in pectoribus imponere, ſed cum iis ludere, et in ſeſe timoris et periculi expertes invicem conjicere, uti pueri poma.



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THE
CERASTES,
OR
HORNED VIPER.



GENERIC CHARACTER.

Transverse *Lamellæ* under the abdomen.
Alternate *Scales* under the tail.

SPECIFIC CHARACTER, &c.

FERRUGINOUS-BROWN HORNED VIPER
with about 150 abdominal plates and 25 sub-
caudal scales.

THE CERASTES, OR HORNED SNAKE.

The Coluber Cerastes, which commonly grows to the length of about a foot or fifteen inches, is distinguished by a pair of horns or curved processes, seated above the eyes and pointing forwards. These horns have nothing analogous in their structure to the horns of quadrupeds, and are by no means to be considered in the light of either offensive or defensive weapons: they increase however the natural antipathy so generally felt against the serpent tribe, and give the animal a more
than

than ordinary appearance of malignity. This serpent is a native of Africa, and is principally found in sandy deserts and dry places. In Egypt? it is common, as well as in some particular parts of Nubia and Abyssinia. It also abounds in Syria and Arabia. It bears a very great analogy to the common viper: its bite is perhaps still more to be dreaded, since exclusive of the general danger in treading accidentally on one of these reptiles, and thus irritating it unawares, it possesses a propensity of springing with great suddenness to a considerable distance, and assailing without provocation those who happen to approach it. In many parts of Africa, according to the testimony of the most respectable travellers, there prevails a method of charming, as it were, or stupifying these, as well as other poisonous serpents, by the use of certain preparations of such powerful efficacy as effectually to secure the person so prepared from being in the least bitten by the animals, though oppressed by every species of irritation. A suspicion might naturally arise that the serpents thus treated had been first deprived of their fangs, and consequently of their power of poisoning; but that this is not the case, is expressly declared by Mr. Bruce, who, during his African travels, had ample opportunities of witnessing these extraordinary experiments. On this subject Mr. Bruce expresses himself as follows:

“ I will not hesitate to aver, that I have seen at Cairo
“ (and this may be seen daily, without trouble or ex-
“ pence) a man who came from above the catacombs
“ where the mummy-birds are kept, who has taken a
“ Ceraastes with his naked hand from a number of
“ others lying at the bottom of the tub; has put it
“ upon

“ upon his bare head, covered it with the common red
“ cap he wears, then taken it out, put it in his breast,
“ and tied it about his neck like a necklace; after
“ which it has been applied to a hen, and bit it, which
“ has died in a few minutes : and to complete the ex-
“ periment, the man has taken it by the neck, and
“ beginning at his tail, has ate it, as one would do a
“ carrot, or a stock of celery, without any seeming
“ repugnance.”

Mr. Bruce adds, that all the black people in the kingdom of Sennaar are perfectly armed in this manner against the bite of the Ceraftes, and put them at any time into their bosoms, and throw them at one another as children do apples, with the most perfect impunity,

DIDUS INEPTUS.



CHARACTER GENERICUS.

Rostrum medio coarctatum rugis duabus transversis : utraque mandibula inflexo apice.

Facies ultra oculos nuda.

Lin. Syst. Nat. p. 267.

CHARACTER SPECIFICUS, &c.

DIDUS nigricans albido-nebulosus, pedibus tetradactylis.

DIDUS INEPTUS.

Lin. Syst. Nat. p. 267.

GALLUS gallinaceus peregrinus.

Clus. exot. 99. t. 100.

CYGNUS CUCULLATUS.

Nieremb. nat. 231.

STRUTHIO CUCULLATUS.

Lin. Syst. Nat. X. p. 155.

Si unico vero et genuino exemplari, quod ab ipsa vita delineari dicitur, undeque reliqua fere omnia adumbrata sunt, danda sit fides ; hebetat vultum hujus avis tam plumbea stupiditas, ut nomen inde triviale adepta

fit. Mole saltem æqualis esse dicitur cygno; cujus ab eleganti forma in reliquis longe abhorret. Color generalis niger est; alarum autem pars media, abdomen, et in cauda plumæ aliquot fere albent. Rostrum enormis maxilla superior prope apicem macula magna rubente distinguitur, basi seu lata parte longe super frontem retro excurrente, ut facies quasi cucullata videatur. Mirum est, cum scientiæ naturalis studio quotidianum fere nunc dierum fiat incrementum, deesse vel unicum specimen singularis istius avis, quæ, quantum ipse comperi, rarissime in Europam illata est ab anno 1598, quo tempore a parvula Mauritii insula Indica advenisse dicitur. Descripserunt eam plurimi auctores, Nierembergius scilicet, Bontius, Clusiusque inter vetustiores, et e recentioribus Buffonus, Edwardus, Briffonus, alique. Pene tamen ignosceremus dubitantibus an revera extiterit, ni aliter testarentur Herbertus alique qui se ipsam in natalibus regionibus suis oculis conspexisse profitentur; ipseque Willoughbeius suum calculum adderet, qui asserit se spolia ejus in museo Joannis Tradescantii vidisse. In Museo Britannico asservatur, quod plurimi auctores imitati sunt, ipsum unde avis depicta est archetypum. Frumento vesci dicitur Didus, et ingenio esse mansuetus. Sitne ad edendum utilis varie disputatur. Alii durum et injucundum ducunt; alii contra dignum putant ut mensæ apponatur; pectus præcipue, quod, teste Bontio, tantum est, ut horum tria quatuorve centum convivis sufficiant. Africæ et Indiæ Orientalis insulas inhabitat.

Denique, liceat fortasse nobis conjicere annon *Diomedæ exulantis* Linnæi nondum ætate provectæ infidæ delineationi Didus originem debeat. Quod si concedatur, certe

certe manus pictoris nimium nimiumque oblita est veritatis, quæ pedes Diomedæ pinnatos alasque amplissimas et longissimas neglexerit, ut taceam cætera, in quibus hæ aves nullo modo convenire queant. E contrario tamen negari non possit rostrum Diomedæ rostro quod Didi putatur non multum esse dissimile; et si specimen Diomedæ junioris examinemus cui color adhuc imperfectus, cujusque super alas cæterasque partes albedo cum nigredine commiscetur, præsertim si avem torpidam et subsidentem fingimus, quod interdum fit, non omnino impossibile fatebimur quin a falsa aliqua hujusmodi repræsentatione Didus originem duxerit. Charltonus in libro cui titulus *Onomasticon Zoicon*, asserit rostrum cum capite Didi tunc temporis in Museo Regalis Societatis Londinensis fuisse servatum. Quod tamen ille rostrum Didi censuit nihil aliud fortasse fuerit quam Diomedæ rostrum. Res igitur non prorsus caret dubio, et optandum admodum est ut avis ipsa vera et genuina, si modo talis alicubi exstet, laudabili physico-
rum hodiernorum diligentia in Europam tandem asportetur.





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THE
D O D O.



GENERIC CHARACTER.

Bill large, bending inward in the middle of the upper mandible, marked with two oblique ribs, and much hooked at the end.

Nostrils placed obliquely near the edge, in the middle of the bill.

Legs short, thick, feathered a little below the knees.

Toes three forward, one backward.

Pennant.

SPECIFIC CHARACTER, &c.

BLACKISH DODO, clouded with whitish;
with tetradactylous feet.

THE DODO.

Will. orn. p. 153. pl. 27.

Edw. pl. 294.

DOD-EERSEN, OR VALGH-VOGEL.

Herbert. trav. p. 382. pl. in p. 383.

This bird, if we may depend on the fidelity of the only original figure, (which is said to have been taken from the life, and from which almost all authors have hitherto

hitherto copied,) is distinguished by an aspect of such confirmed stupidity, as to have obtained the trivial name of *ineptus*. In size it is said at least to equal, if not exceed, a swan, but in shape and general appearance forms a striking contrast to that elegant bird. Its prevailing colour is black, but the middle of the wings, the belly, and some of the tail feathers are white, or nearly so. The beak, which is of a very singular form, and of enormous size, is distinguished near the tip by a large red patch on the upper part; while the base or broad part runs far back over the front, so as to give the face a sort of hooded appearance. It is astonishing that in the present improved state of natural history, we should still be at a loss for a single specimen of this extraordinary bird, which, so far as I am able to discover, has scarce been imported into Europe since the year 1598, nearly at which period it is said to have been brought from the little island of Mauritius in the East Indies. It has been described by several authors, as Nieremberg, Bontius, and Clusius, amongst the older writers, and by the Count de Buffon, Edwards, Brisson, and others amongst the moderns. Were it not, however, for the attestations of Herbert and others, who profess to have seen it in its native regions, together with that of Mr. Willoughby, who assures us that he saw a skin of it in the Museum of Sir John Tradescant, we might be almost inclined to call in question the existence of so singular an animal. The original figure above mentioned, and which has been repeated by so many authors, is preserved in the British Museum. This bird is said to be granivorous and of a gentle nature. With respect to its merit as an article of food,
the

the opinion of authors seems to vary; some representing it as tough and unpleasant, while others consider it as by no means ill adapted for the table; especially the breast, which, according to Bontius, is of such a size that three or four of them are enough for a very large company. It is an inhabitant of Africa and the East-Indian islands.

After all, can it be possible that an Albatross, (*Diomedea exulans* Lin.) not fully grown, and inaccurately represented by a draughtsman, may have given rise to the supposed existence of the Dodo? If this be granted, we must surely admit an uncommon degree of carelessness in the painter, who could thus neglect to express the webs on the feet of the Albatross, as well as to represent the wings extremely large and long, instead of small and short; together with other particulars in which the two birds can by no means be made to agree. Yet, on the other hand, it is undeniable that the general appearance of the beak of an Albatross is not greatly dissimilar to that of the supposed Dodo. And if we contemplate a young or half-grown specimen of the great Albatross, before it has arrived at its proper colour, and while there is a mixture of black and white on the wings and other parts, and to this superadd the heavy and crouching posture in which it sometimes appears, it will perhaps seem not absolutely impossible that an erroneous sketch from such a bird may have been the basis on which the existence of the Dodo has hitherto stood. Charleton in his *Onomasticon Zoicon*, affirms that the bill and head of the Dodo were then in the Museum of the Royal Society. This reputed bill of a Dodo may however have been
nothing

nothing more than that of an Albatross. The subject therefore may be still considered as in some degree doubtful, and it remains to wish that the laudable zeal and spirited exertions of modern naturalists may at length put an end to the uncertainty by importing the real bird into Europe, if it can be found to exist.

PENNATULA ARGENTEA.



CHARACTER GENERICUS.

Flores Hydræ, ad marginem denticulatum pinnarum.

Stirps libera, fubulata, apice pinnata.

Lin. Syst. Nat. p. 1321.

CHARACTER SPECIFICUS, &c.

PENNATULA penniformis lanceolata, stirpe lævi tereti, pinnis creberrimis imbricatis.

PENNATULA lanceolata pennæ facie, stirpe lævi tereti, pinnis creberrimis imbricatis dentatis virgatis.

Soland. et Ellis zooph. p. 67. n. 10.

Inter maximas quæ hætenus notæ sunt Pennatulas habenda est hæc species, nulli cedens pulchritudine: est enim argenteo-alba, utrinque super partes expansas seu penniformes lineis aterrimis eleganter striata. Rarissima est, et maria incolit Indica. Delineata est figura magnitudine naturali ab eximio specimine quod suppeditavit Museum Britannicum.





THE
SILVER SEA-PEN.



GENERIC CHARACTER.

Animal free, or locomotive.

Body (generally) expanding into processes on the upper part.

Processes or branches furnished with rows of tubular denticles.

Polype-head proceeding from each tube.

SPECIFIC CHARACTER, &c.

LANCEOLATE FEATHER-SHAPED PEN-
NATULA, with round smooth stem and
thick-set imbricated pinnules.

SILVER SEA-PEN.

Ellis. and Soland: zooph. p. 66.

t. 8. f. 1. 2. 3.

Of all the Pennatulæ yet known the present is one of the largest as well as the most specious in its appearance; being of a beautiful silvery white, elegantly striated on each of the feather-like processes with lines or streaks

freaks of the deepest black. It is extremely rare, and is a native of the Indian seas. The figure here given is copied from the very fine specimen in the British Museum, and represents the animal in its natural size.

PAPILIO RIPHEUS.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato-capitatae.

Alæ sedentis erectæ sursumque conniventes (volatu diurno.)

Lin. Syst. Nat. p. 744.

CHARACTER SPECIFICUS, &c.

PAPILIO alis sexdentato-caudatis nigris viridi fasciatis, posterioribus medio aureo-rubris nigro maculatis.

PALILIO alis sexdentato-caudatis nigris viridi fasciatis, posterioribus subtus macula ani ferruginea nigro punctata.

Gmel. Syst. Nat. p. 2235.

Fabr. mant. inf. 2. p. 6. n. 43.

Cram. pap. 33. t. 385. f. A. B.

Eq. Archiv.

Papilionem in hac tabula depinximus non modo rarissimum, sed etiam coloribus splendissimis omnibus fere sui generis antecellentem. Haud multis abhinc annis in Europa innotuit hæc species in perpauca museis vel
nunc

nunc conspicienda. Indiæ Orientalis est incola, et in China præcipue invenitur. Papilioni Leilo Linnæi valde affinis est tum forma tum coloribus; jactat tamen majorem elegantiam lautioremque varietatem. Eruca, hujus papilionis parens adhuc incognita est, verisimile autem est eam erucæ papilionis Leili a Domina Merian inter insecta Surinamensia depictæ non absimilem esse.





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R I P H E U S,
OR THE
ORIENTAL EMPEROR.



GENERIC CHARACTER.

The *Antennæ* or *Horns* thickening towards the upper part, and generally terminating in a knob, or club-shaped tip.

The *Wings* (when sitting) erect, and meeting upwards. (*Flight* diurnal.)

SPECIFIC CHARACTER.

BLACK BUTTERFLY fasciated with golden-green; the lower wings marked in the middle with a large patch of golden-red spotted with black, and furnished with six elongated or subcaudated processes.

Cram. pap. 33. t. 385. f. A. B.

Drury. 2. pl. 23. f. 1. 2. ?

We have here represented a *Papilio*, which, exclusive of the extreme rarity of the species, may perhaps be pronounced the most beautiful of that splendid tribe. It is but a few years since this gay insect became known in Europe, and it is at present so rare as to be found in
very

very few collections. It is an East-Indian insect, but is principally found in China. It is very nearly allied both in shape and general disposition of colours to the *Papilio Leilus*; but is still more elegant, and displays a much richer variety of tints. The caterpillar of this butterfly is yet unknown; but it probably bears a near resemblance to that of *Papilio Leilus*, which has been figured amongst the Surinam insects by Madam Merian.

PICUS ERYTHROCEPHALUS.



CHARACTER GENERICUS.

Rostrum polyedrum, rectum : apice cuneato.

Nares pennis fetaceis recumbentibus obtectæ.

Lingua teres, lumbriciformis, longissima, mucronata, apice retrorsum aculeata fetis.

Pedes scanforii.

Lin. Syst. Nat. p. 173.

CHARACTER SPECIFICUS, &c.

PICUS capite toto rubro, alis caudaque nigris, abdomine albo.

Lin. Syst. Nat. p. 174.

PICUS ERYTHROCEPHALUS VIRGINIENSIS.

Briss. av. 4. p. 53. n. 19. t. 3. f. 1.

Notissima est hæc pici species per omnem fere Septentrionalem Americam, habeturque arvis et pomariis inimicissima, zæque et fructibus magnam stragem inferre. Elegans est, si quæ alia, et concinna. Caput collumque lætissime phoenicea. Cætera avis nigrat quasi polita non sine nitore quodam cæruleo ; si excipias pectus, abdomen, uropygium, remigesque secundarios,

cundarios, quæ omnia nivea sunt, scapis eorundem remigum nigris. Rostrum pedesque saturatim plumbea. Mas et fœmina valde inter se similes: fœminæ tamen caput minus rubet, immo interdum fere fuscum. Magnitudine prope æqualis est hæc species pico maculato majori Anglico, qui picus major Linnæi.



THE
RED-HEADED WOODPECKER.



GENERIC CHARACTER.

Bill angular, strait, cuneated at the tip.

Nostrils covered with reflected bristly feathers.

Tongue cylindric, worm-shaped, very long, sharp-pointed, and (generally) aculeated at the tip with reflex bristles.

Feet formed for climbing, viz. two toes forward and two backward.

SPECIFIC CHARACTER, &c.

BLACK WOODPECKER with the head and neck crimson; breast, abdomen, and shorter wing-feathers white.

RED-HEADED WOODPECKER.

Catesb. car. 1. pl. 20.

The species of Woodpecker here figured is extremely common in most parts of North America, and is considered as a most destructive enemy to plantations and orchards, devouring great quantities of maize and fruit. It is a bird of singular beauty and neatness of appearance. The head and neck are of the richest crimson: the rest of the bird of a deep polished black, with a blueish

blueish gloss, except the breast, belly, rump, and shorter feathers of the wings, which are snow-white. The shafts of the white wing-feathers are black. The beak and legs are of a deep lead-colour. The male and female greatly resemble each other, but the head of the female is less rich in colour, and sometimes even brownish. The size of this species is nearly that of the greater spotted English Woodpecker, or *Picus Major* of Linnæus.

RANA ARBOREA.



CHARACTER GENERICUS.

Corpus tetrapodum, nudum, ecaudatum.

Lin. Syst. Nat. p. 354.

CHARACTER SPECIFICUS, &c.

RANA corpore lævi: subtus punctis contiguis
tuberculato, pedibus fissis, unguibus orbicu-
lato-dilatatis.

Lin. Syst. Nat. p. 357.

RANUNCULUS VIRIDIS.

Gesn. pisc. 808.

RANA ARBOREA S. RANUNCULUS VIRI- DIS.

Raj. quadr. 251.

In Anglia licet ignoretur bella hæc et parvula ranæ species, Galliæ tamen, Germaniæ, multisque Europæis regionibus communis est. Inter arborum folia præcipue versatur, quorum, ut plurimum, paginæ inferiori solet adhærere; pedibus ad hoc ipsum mire formatis, cum scilicet singulus digitus in orbiculum depresso desinat; ita ut rana a glabra quavis superficie fatis se-
cura

cura possit pendere. Nascitur, ut et reliquum genus, primo gyrinus : fœminæ enim, ut ova deponant, arbores deferunt, et aquas petunt ; quo tempore mas faccum seu globum magnum e gula protrudit, alias vix et ne vix visibilem.



THE
TREE FROG.



GENERIC CHARACTER.

Body four-footed, naked, tailed.

SPECIFIC CHARACTER, &c.

GREEN FROG, with unwebbed feet and orbicular flattened toes.

THE TREE FROG.

The beautiful little species of frog here represented is not uncommon in many parts of Europe, as France, Germany, &c. but is not found in England. It resides amongst the foliage of trees, and generally adheres to the under side of the leaves, the structure of the feet being finely adapted for this power; each toe terminating in an orbicular flattened process, by means of which the animal can apply itself with perfect security to the smoothest surface. Like others of its genus, it is first produced in the state of a tadpole; the females during the breeding season leaving the trees, and betaking themselves to the water, in order to deposit their spawn. The male during that period has a large inflated gular pouch or globe, which at other times is scarce ever visible.

ACARUS AURATUS.



CHARACTER GENERICUS.

Pedes octo.

Oculi duo ad latera capitis.

Tentacula duo articulata, pediformia.

Lin. Syst. Nat. p. 1022.

CHARACTER SPECIFICUS, &c.

ACARUS ORBICULATUS PLANIUSCULUS,
aureo-maculatus, supra excavato-punctatus,
abdomine subcrenato.

ACARUS IGUANÆ?

Fabr. spec. inf. 2. p. 485.

Spargi videtur genus Acari per totum orbem, continetque proculdubio multas species adhuc incognitas, quarum plurimæ ob parvitatem non nisi Lynceo oculo possunt discerni. Sunt tamen nonnullæ species quæ cæteras adeo mole superant ut facile etiam modico intervallo percipi possint; e. g. *Acarus Ricinus* Linnæi in canibus frequenter conspectus, *Acarus columbarum* in columbis, et acarus qui ob vividum ruborem et superficiem lanuginosam *holosericus* dicitur. Licet distinguantur plerique forma singulari potius quam pulchritudine,

chritudine, speciem tamen exoticam excipiamus necesse est quam ostendit tabula non tantum magnitudine naturali, sed et microscopio auctam : notas enim gerit hæc non vulgaris splendoris ; maculas scilicet tres in corpore superiori, et interdum plures, colore quodam metallico velut aurato, qui splendor præcipue notabilis, si immersum fuerit insectum in liquore qui vulgo dicitur *spiritus vini*. Color imus fusco-virefcens, pallet, punctulis minimis nigris corpori impressis. Abdominis margo levissime crenata serie macularum nigrarum. Caput magna ex parte conformatum est eodem fere modo quo acari columbini, cui in hoc auratus valde videtur affinis ; ope nempe rostri, cujus superficies inferior præcipue ferrata, uncis retro spectantibus, animali quod vexare cupit arctissime adhærens. Summa autem est similitudo inter hanc speciem et Acarum Iguanæ Fabricii, quem memorat ille detectum esse mordicus affixum sacculo gulari Lacertæ Iguanæ Linnæi, quæ postea in spiritu vini affervabatur. Simili modo auratus se affigit Colubro Najæ Linnæi, cujus specimina eodem liquore condita remanent. Verisimile est speciem esse novam, nisi potius varietatem esse Acari Iguanæ de quo jam diximus. Memorat Seba serpentes interdum acaris infestari, sed, quod vitium erat sui temporis, laxè et ambigue loquens, non acaros sed pediculos eos vocat.



L. V.

London. Published for W. Wood, by J. P. Knapton & Co. 1815. Brewer Street.

THE GOLD-SPOTTED ACARUS.



GENERIC CHARACTER.

Eight *Legs*.

Two *Eyes*, situated on the sides of the head.

Two *Tentacula*, jointed, and shaped like feet.

SPECIFIC CHARACTER.

ORBICULAR FLATTISH ACARUS, with
gold-coloured spots; the body marked above
by numerous impressed points; the abdomen
subcrenated.

The genus *Acarus*, which seems to be diffused throughout all parts of the world, and of which a great many species must doubtless remain still undiscovered, is, in general, distinguished by the extraordinary minuteness of its appearance; several kinds being scarce visible without close inspection, and easily escaping the notice of a common eye. Some species however so far exceed the rest of the genus in size as to be sufficiently conspicuous even at a moderate distance; for instance, the *Acarus Ricinus* or common tick, so frequently seen on dogs; the *Acarus columbarum*, not less plentiful on pigeons and some other animals; and the *Acarus holosericeus* or velvet mite, so remarkable for its bright scarlet colour and downy surface. In general the *Acari* are much
more

more distinguished by the singularity than the beauty of their appearance. The very curious exotic species here figured, both in its natural size and magnified by the microscope, is an exception to this general rule, and is adorned with marks of no inconsiderable splendor; the upper part of the body being furnished with three and sometimes more large spots of a golden tinge, accompanied by a metallic lustre. This appearance is however most conspicuous while the animal is immersed in spirits of wine. The general colour of this species is a pale greenish-brown, variegated with minute specks of black, forming so many impressed spots on the surface of the body. The edge of the abdomen is very slightly notched or indented by a row of marks of the same colour. In the general form of the apparatus at the head, this species bears a most striking affinity to the pigeon-tick or *Acarus columbarum*, being furnished like that animal, with a ferrated snout, the processes of which lying on the under surface, and pointing backwards, enable it to adhere with great firmness to the skin of the creature it infests. The species to which it bears the greatest resemblance is the *Acarus Iguanæ* of Fabricius, which is by that author commemorated as having been found strongly affixed to the gular pouch of the *Lacerta Iguana* of Linnæus preserved in spirits. The present species is found adhering in the same manner to specimens preserved in spirits of the *Coluber Naja* or *Cobra de Capello*. It is most probably a new species, unless it should be regarded as a variety of the *A. Iguanæ* of Fabricius. The circumstance of snakes being sometimes infested by Acari is mentioned by Seba, who, in the usual inaccurate style of his time, gives them the title of *Pediculi*.

ALCEDO ISPIDA.



CHARACTER GENERICUS.

Rostrum trigonum, crassum, rectum, longum.

Lingua carnosa, brevissima, plana, acuta.

Pedes gressorii *plerisque*.

Lin. Syst. Nat. p. 178.

CHARACTER SPECIFICUS, &c.

ALCEDO BRACHYURA, supra cyanea, subtus
fulva, loris rufis.

Lin. Syst. Nat. p. 179.

ALCEDO BRACHYURA SUBCRISTATA
CÆRULEA, subtus rufa, loris fulvis, ver-
tice nigro undulato, macula aurium gulaque
albis.

Lath. ind. orn. p. 252.

ALCYON.

Gesn. av. 85.

ISPIDA.

Gesn. av. 571.

Will. orn. 101.

Non modo avium Britannicarum sed et Europæarum
nitidissima est et lautissima Alcedo Ispida, exceptis Lin-
næi Coracia Garrula Meropeque Apiastro, quas neutras
I
genuit

genuit Britannia, *hanc* licet advenam ad nos rarissimus casus appulerit. Cum p' sciculis vescatur Alcedo, rivos ideo et loca impertubata quærit, solitudinis et silentii cupida; quam ob causam melancholiæ symbolum habetur, exemplumque egregiæ pulchritudinis protervos oculos sedulo evitantis, cuique non male convenit celeberrimi poetæ votum "Flumina amem sylvasque."

Turbata motu fertur celerrimo vix ac ne vix horizontem superans, coloremque adeo vividum in transitu ostentat, ut alis papilionis Menelai fere æqualem diceres. Interdum suspenſa super aquas alis expansis rapideque vibratis more Nisi conspicitur, fulgores jactans tunc temporis præter solitum splendidos. Inter ripas fluviorum, interdum etiam aquarum stagnantium, in foraminibus alte effossis nidificat, ova deponens quinque, septem, vel etiam novem. Inter marem et feminam fere ambigua est similitudo. Alcedo plerumque vera Halcyon creditur, quam nidum fluitantem construere putabant veteres; qui in hoc fortasse errarunt, quod nidum Colymbi alicujus pro nido Halcyonis habuerint. Colymborum enim certæ species nidos fluitantes e plantis aquaticis revera contexunt, qui juxta riparum aggeres inter arundines laxius siti, super aquas nonnunquam a ripa huc illuc feruntur.



THE COMMON KINGFISHER.



GENERIC CHARACTER.

Bill trigonal, thick, strait, long, sharp-pointed.

Tongue fleshy, very short, flat, sharp-pointed.

Feet (in most species) gressorial, *i. e.* three toes forward and one backward, and the three lower joints of the middle toe closely jointed to those of the outmost.

SPECIFIC CHARACTER, &c.

SHORT-TAILED KINGFISHER, blue above, fulvous beneath, with rufous lores and white auricular spot.

THE COMMON KINGFISHER.

Lath. Syn. 1. p. 626.

Will. orn. 146.

LE MARTIN-PÊCHEUR.

Buff. ois. 7. p. 164.

Pl. enl. 77.

The *Alcedo Ispida* or common Kingfisher is by far the most brilliant of the British birds: indeed no other bird of Europe can equal it in liveliness of colours ex-

cept the Roller, (*Coracias Garrula*. Lin.) and the Bee-Eater, (*Merops Apiaſter*. Lin.) neither of which are natives of Britain, though the former has ſometimes been ſeen as an accidental ſtraggler. The Kingfiſher is a bird of a retired and ſolitary diſpoſition, and as from the nature of its food, (which conſiſts entirely of ſmall fiſh,) it is moſt commonly found near ſtreams and unfrequented places, it has therefore been fixed upon as an emblem of melancholy, and an example of dazzling beauty, in a ſtate of voluntary retirement. “*Flumina amem ſylvaſque*” ſeems to be its motto, and it is rarely ſeen except in ſuch ſituations. If diſturbed, it darts along in a rapid horizontal motion, and diſplays a tranſitory glance of colour which is almoſt equal in luſtre to the wings of the *Papilio Menelaus*. Sometimes it may be ſeen ſuſpended over the ſtream in the manner of a hawk, and rapidly vibrating its expanded wings, when its colour is ſtill more beautifully conſpicuous. The Kingfiſher builds in deep holes in the banks of rivers, and ſometimes of ſtagnant waters. It lays from five to ſeven or even nine eggs. The male and female bear an extreme reſemblance to each other. The Kingfiſher is generally ſuppoſed to be the true *Halcyon* of the ancients, which was believed to build a floating neſt. In order to account for this erroneous idea, we need only ſuppoſe that the neſts of ſome of the *Colymbi* or Grebes were miſtaken for thoſe of the *Halcyon*: ſome of the *Colymbi* do really build floating neſts of aquatic plants, &c., which though placed amongſt the reeds contiguous to the banks, are yet ſo looſe as occaſionally to be carried to ſome little diſtance on the ſurface of the water.

GYMNOTUS ELECTRICUS.



CHARACTER GENERICUS.

Caput operculis lateralibus.

Tentacula duo ad labium superius.

Oculi cute communi tecti.

Membrana Branchioftega radiis quinque.

Corpus compressum, subtus pinna carinatum.

Lin. Syst. Nat. p. 144.

CHARACTER SPECIFICUS, &c.

GYMNOTUS NUDUS, dorso apterygio, pinna caudali obtusissima anali annexa.

Lin. Syst. Nat. p. 144.

GYMNOTUS CAUDA TRUNCATA, maxilla inferiore longiore.

Gron. zooph. 168.

GYMNOTUS NIGRICANS, cauda curta obtusa.

Seb. mus. 3. p. 108. t. 34. f. 6.

Bloch. ausl. Fisch. 2. p. 43. t. 156.

Vim illam electricam quam pro arbitrio emittere potest Torpedo, quamque illi procul-dubio ad repellendas injurias dedit Natura, admirati sunt antiqui simul ac recentiores

recentiores physici. Tacta Torpedine, ictum illico violentum sentit hostis, probaturque ab experimentis, iisque præcipue Domini Walsh in Actis Anglicis, hunc ictum vere et omnino esse electricum, nullo modo diversum ab illo qui a machina deducitur; posseque cum plurimis, si conjunctæ sint manus, eodem temporis puncto communicari. Piscis vero quem nunc describere pergitur, vel ipsam Torpedinem vi sua electrica longe antecellit: quos enim in fluviis suis natalibus sanus valensque tetigerit, non solum motu sensuque per breve aliquod tempus privat; sed fertur insuper illos qui parum fauste in iisdem aquis nataverint, ab immodico ejus impetu subito percitos interdum periisse. Mira hac facultate vitam sustentat Gymnotus; piscesque, seu alia animalia prope ludentia quæ tactu suo obtorpuerit, corripit statim devoratque tyrannus ille quarum electricus. Paucis abhinc annis viva horum piscium specimina in Angliam illata sunt, et Londini aliisque locis publice spectabantur. Vultu est Gymnotus tetrico et injucundo, primoque intuitu anguillam magnam quodammodo repræsentat, Corpus suum vel contrahere potest vel producere; fibras nempe aliquot musculosas constringendo seu remittendo. Colore nigricat. Caput illi est crassum, corpore paulo latius, depressiusque, seu complanatum. Oculi valde exigui; Os magnum: utrisque maxillis insunt dentes parvi, acuti, numerosissimi. Circa caput, præcipue sinciput, varia sunt foramina. Totum animal muco lubrico, muco anguillæ non absimili tegitur. Squamæ illi visibiles nullæ sunt; detegi tamen fortasse possent, si cutis exsiccata et expansa esset, more cutis anguillæ. Alii sunt hujus generis pisces, qui tamen Gymnoto electrico adeo sunt absimiles ut, excepto caractere

charactere generico, cum illo nequaquam conveniant, omnique vi electrica penitus carent. Americam Australem incolit *Gymnotus electricus*, præcipue autem in Rivo Surinam in Guiana invenitur.



THE ELECTRICAL GYMNOTUS.



GENERIC CHARACTER.

Head furnished with lateral opercula.
Two Tentacula at the upper lip.
Eyes covered by a skin.
Branchiostegous Membrane with five rays.
Body compressed, and carinated by a fin beneath.

SPECIFIC CHARACTER, &c.

BLACKISH GYMNOTUS, without dorsal fin ;
the caudal fin extremely obtuse and jointed
to the anal one.

THE ELECTRICAL EEL.

The power with which Nature has armed the Torpedo, is such as to have rendered it the wonder of the ancient as well as the modern world. This power consists in a natural electricity, which is exerted at the pleasure of the animal, in such a manner as to preserve it in great measure secure from all attacks of other creatures ; since no sooner is it touched than a very strong electric shock is instantly felt by the invader.

That

That it is a real electric shock, not differing from that which is received from an electrical machine, has been clearly proved by repeated experiments; particularly by those of Mr. Walsh, related in the Philosophical Transactions; from which it appears that the shock is communicated at the same instant to a number of persons joining hands. The fish however which we now proceed to describe, is possessed of a much greater share of natural electricity than the Torpedo: so powerful is the shock which this fish, in its native rivers, and in full vigour, is capable of inflicting, that it is said to deprive almost entirely of sense and motion for some minutes, such as are exposed to its approach, and that, in consequence of this violent exertion of its electricity, it has sometimes proved fatal to such as have incautiously ventured to swim in the same water. It is by the power of electricity that the *Gymnotus* supports its existence: whatever smaller fish or other animals happen to approach it are instantly stupefied, and fall an easy prey to the electrical tyrant.

Some years ago some of these curious fish were brought alive from Surinam into this kingdom, and were publicly exhibited at London and elsewhere. It is a fish of a disagreeable appearance, and on a cursory view is not much unlike a large eel. Its colour is blackish, and it has a power of shortening at pleasure the length of its body, by the contraction of its muscular fibres, and again relaxing and extending itself to its former length. The head is short, somewhat broader than the body, and a little depressed or flattened: the eyes are very small; the mouth large, and both jaws are furnished with a great many very small sharp teeth.

About

About the head, especially on the fore-part, several foramina or pores appear. The whole animal is coated with a sort of mucus, not unlike that of an eel. The *Gymnotus* is destitute of apparent scales; but the probability is that in a dried skin prepared in the manner of an eel-skin the scales might be found.

There are some other species of *Gymnoti*, which differ very much in their appearance from this: they have no electric power, and are only approximated to this species by their generic character.

The *Gymnotus electricus* is a native of South America, and is principally found in the river Surinam in the province Guiana.

SCARABÆUS MIDAS.



CHARACTER GENERICUS.

Antennæ clavatæ capitulo fissili.

Tibiæ anticæ sæpius dentatæ.

Lin. Syst. Nat. p. 541.

CHARACTER SPECIFICUS, &c.

SCARABÆUS exscutellatus, thorace tricorni,
clypeo sinuato bicorni.

Fab. Syst. Ent. p. 21.

—— *Spec. inf.* p. 24.

Gmel. Syst. Nat. p. 1534.

Varium adeo et multiforme est totum scarabæorum genus, cornuum partiumque prominentiorum tanta est et fere incredibilis diversitas, ut in iis generandis pene luisse naturam putemus. Quod si majoribus animalibus mole æquales essent scarabæi, ipsa poetarum et pictorum monstra, quibus quælibet audendi fingendique potestas, a revera existentibus vincerentur. Aliis caput tantum cornutum est, aliis tantum thorax, aliis tum caput tum thorax. Inter rarissimas vero simul ac maxime singulares species eminet scarabæus iste in tabula, qui Americam incolit; præcipue Australem? Color est aterrimus :

mus : corporis inferiora, præsertim versus pectus et inflexiones crurum tomento obscure ferrugineo vestiuntur. Elytra seu alarum thecæ exteriores striis paucis longitudinalibus notantur. Perpulchrum rari hujus insecti specimen in Museo Leveriano conspicitur.



London, Du Ruisseau Feb. 21st 1893 by F. T. A. Nodder 2920 A. is. 8 mms. front.

卷之四



Leiodontia hirsuta (Figs 18 & 19) by J. A. Audouin & J. A. Branner, 1861.

THE MIDAS BEETLE.



GENERIC CHARACTER.

Antennæ divided at the tip or head into several lamellæ.

Tibiæ, or second joints of the fore-legs generally toothed.

SPECIFIC CHARACTER.

NON-SCUTELLATED BEETLE, with broad treble-horned thorax and double horned sinuated clypeus.

In the beetle tribe we are presented with a wonderful, and, as it were, almost capricious diversity of form. Every variation of horn and process that imagination can conceive being exemplified in the different species of this extensive genus; and if their size approached to that of the larger animals, even the monsters of romance would be exceeded by the realities of nature. In some the head alone is horned, in others the thorax only; and in others both head and thorax are furnished with these appendages. Amongst the rarest, as well as the most singular species, may be reckoned the beetle
here

here represented, which is a native of America, and particularly of South America? Its colour is a deep black; but the under parts, especially toward the breast and the insertions of the legs, are coated with a dark ferruginous down. The Elytra or wing-sheaths are marked by a few longitudinal striæ. A very fine specimen of this rare insect is to be found in the Leverian Museum.

PSITTACUS MELANOPTERUS.



CHARACTER GENERICUS.

Rostrum aduncum: mandibula superiore mobili;
cera instructa.

Nares in rostri basi.

Lingua carnosæ, obtusa, integra.

Pedes scanforii.

CHARACTER SPECIFICUS, &c.

PSITTACUS pallide viridis, dorso alisque nigris,
remigibus secundariis luteis apice cæruleis,
rectricibus purpureis fascia nigra.

Lath. ind. orn. p. 132.

PSITTACUS pallide viridis, dorso, rectricibus
alarum, caudæ fascia remigibusque primariis
nigris, secundariis flavescentibus cæruleo-
punctatis.

Gmel. Syst. Nat. p. 350.

Psittacus Melanopterus, coloribus elegantissimis uber-
rime ornatus, insulam Javam inhabitat, in Batavia præ-
cipue conspectus. In tabula exprimitur avis magnitu-
dine prope naturali. In museis rarissima est hæc species.
Specimen ipsissimum, unde hæc nostra figura depicta
est, in Museo Britannico asservatur.

THE
BLACK-WINGED PARRAKEET.



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.
Nostrils round, placed in the base of the bill.
Tongue fleshy, broad, blunt at the end.
Legs short. Toes formed for climbing, viz. two forward and two backward.

SPECIFIC CHARACTER, &c.

PALE-GREEN PARRAKEET, with black back and wings; the secondary wing-feathers yellow tipped with blue; the tail lilac-coloured and crossed by a black bar.

PERRUCHE à ailes variées.

Buff. 6. p. 172.

PETITE PERRUCHE de Batavia.

Pl. enl. 791. f. 1.

The *Pittacus melanopterus*, so remarkable for the elegance of its colours, is a native of the island of Java, and is found at Batavia. The plate represents it nearly of its natural size. It is a species very rarely seen in collections. The beautiful specimen from which this figure was executed is in the British Museum.



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BALÆNA MYSTICETUS.



CHARACTER GENERICUS.

Dentium loco in maxilla superiore laminæ corneæ.

Fistula duplex.

Lin. Syst. Nat. p. 105.

CHARACTER SPECIFICUS, &c.

BALÆNA naribus flexuosis in medio capite, dorso
impinni.

Lin. Syst. Nat. p. 105.

BALÆNA dorso impinni, fistula in medio capite,
dorso caudam versus carinato.

Gron. zooph. 139.

BALÆNA vulgaris edentula, dorso non pinnato.

Raij. pisc. p. 16. & 6.

BALÆNA vera Rondeletii, et Balæna Rondeletii,
Gesneri et aliorum.

Will. pisc. p. 38. 35.

Licet ob formæ externæ similitudinem et vitam
æquoream videatur fortasse inter pisces et animalia ce-
taria commune esse quoddam cognationis vinculum,
revera tamen *mammalia aquatica* habenda sunt. Utcun-

que enim corporis figura, quodque pedibus carere putentur, a reliquis quadrupedibus primo visu longe discrepent, sunt tamen iis revera pedes, quamvis non extrinsecus visibiles; cum habeant pinnæ duæ anteriores ossa iis analogæ quibus instruuntur pedes antiqui cæterorum quadrupedum, quibus vero postici, ea contineant duæ posteriores, quæ in cauda quasi coadunatæ pinnam unicam horizontalem videntur efficere. Similis quoque est partium internarum conformatio ac in aliis mammalibus, pulmonum scilicet, intestinorum, &c. Teper præterea sanguis, ut in illis, feminæque pullos lacte alunt. Tanta est in omnibus cetariis characterum generalium similitudo, ut in uno genere fere reponi possent. Ut vero species facilius dignoscerentur, Linnæo et omnibus fere physicis recentioribus placuit illa in quatuor genera dividere, quæ notis secundariis, situ nempe dentium, fistularum in capite, aliisque signis distinguuntur, quæ vocantur *Monodon*, *Balæna*, *Phyfeter*, *Dolphinus*. Horum in præcipuis Balæna et Phyfetera continentur species maximæ. Omnium princeps est Balæna Mysticetus, quo sane majus monstrum nec mare nec tellus generat, ni verum sit quod de Krakene narratur. Antequam numerum redegisset balænarum, quem jam optime callent septentrionales populi, capiendi modus, conspecti sæpius sunt Mysticeti longitudine centum pedum. Raro nunc dierum videntur qui pedes sexaginta superant. Mysticeto vix excogitari possit aliud animal rudius et informius. Constat enim fere tertia pars e capite. Os monstrofe amplum. Lingua interdum pedes octodecim seu viginti longa. Oculi pro corpore minutissimi. In maxilla superiore sitæ sunt numerosissimæ laminæ corneæ serie æquali dispositæ, quæ vulgo *os cetaceum*

retaceum vocantur. Per fistulam, quæ duplex in summo capite, quasi columnam aquæ in altum assurgentem incredibili vi eructat. Color communis est livide albedo-cinereus, dorso pinnisque obscurioribus et fere subnigricantibus. Variat autem ut et alia pleraque animalia, colore plus minusve faturato. Habitat ut plurimum, in maribus septentrionalibus, ibique arte omnigena in ejus perniciem conspiratur: in merce enim est oleum cetarium. Victitat præcipue Medusis, Sepiis, aliisque ejusmodi.

Dolendum est poetas, utcunque legentium animos suavitate delectent, et percellant sublimitate, in describendis iis quæ ad historiam naturalem spectant epitheta adeo inscite feligere, ut ipsam rei de qua canunt imaginem sæpius a vero detorqueant. Hoc nullibi manifestius quam in descriptione illa, grandi certe et magnifica, quæ apud Miltonum legitur balænæ dormientis, cui tamen adjungitur epitheton falsum omnino et incongruum.

“ horrida ponti
Bellua, quæ fluctus inter mirabile Monstrum
Navigat, æquoreæque exultat maxima gentis.
Olim hæc noctivagæ rectori visa biremis,
Norvegii falis in spuma dum forte quiescit,
(Sic perhibent nautæ) vasta insula creditur, amplo
Immensum porrecta sinu; latus anchora prensat
Squamosum, et tuta fruitur statione Magister,
Dum pontum obvelant tenebræ, luxque alma moratur.”
Parad. amifs. lat. reddit. a DOBSON.

Nulli autem in toto genere contingunt squamæ. At si forte me putet aliquis hypercriticum, et voluisse Miltonum balænam non vere squamiferam, sed superficiem tantum

tantum habentem rudem et scabrosam, qualis scilicet est cortex arboris, huic opinioni invitus assentiar: quod enim illum in errorem duxerit non e longinquo petendum, figura nempe in Gesneri operibus, quæ pravissime efficta quasi magnis squamis vestita videtur, cuique præterea inscribitur “ Nautæ in dorso Cetorum, quæ insulas putant, anchoras figentes, sæpe periclitantur.” Vix possit dubitari quin poeta nostras celeberrimus, qui multifaria imbutus scientia, librorum quasi gurges erat et helluo, Gesneri scriptis, grandi tunc temporis scientiæ naturalis thesauro, optime effret versatus, quodque balæna imago quam ibi viderat altius in animo inhæserat.



THE
MYSTICETUS,
OR
GREAT NORTHERN WHALE.



GENERIC CHARACTER.

No *Teeth*, instead of which are situated horny laminæ in the upper jaw.

A double *Fistula* or spiracle on the top of the head.

SPECIFIC CHARACTER, &c.

TOOTHLESS WHALE, blackish above, white below, without dorsal fin.

THE COMMON OR GREENLAND WHALE.

THE COMMON WHALE.

Pennant. Arct. Zool. sup. 101. n. 5.

THE WHALEBONE WHALE.

Phil. transf. abr. 7. p. 424.

The cetaceous animals, however nearly approximated to fishes by external form and residence in the waters, are in reality to be considered as aquatic quadrupeds: for though from their general shape and seeming want of

of feet they appear at first view widely removed from the rest of the Mammalia, yet these parts really exist, though not outwardly visible; the two anterior fins being furnished with bones like the feet of other quadrupeds, and the two posterior ones (which from their situation, appear to form but one horizontal caudal fin,) containing the analogous bones of the two hind feet. All the internal parts of this tribe of animals are likewise formed on the same plan as in other Mammalia: having similar lungs, intestines, &c. They have also warm blood, and the females, like other quadrupeds, suckle their young. The general characters of all the Cetacea are so similar, that, in an enlarged view, they might all form one great genus; but as this perhaps would not facilitate the distinction of the several species, Linnæus and most other modern naturalists have agreed in dividing the cetaceous animals into different genera, distinguished by secondary characters, as the situation of the teeth and of the spouting-hole or fistula on the head. This distribution admits of four distinct genera, viz. *Monodon*, *Balæna*, *Phyfeter*, *Delphinus*. Of these the genera of *Balæna* and *Phyfeter* are the two principal, and contain the largest animals. The *Balæna Mysticetus*, or great northern Whale, is as it were the chief of the whole tribe, and (unless the Kraken be not a fabulous existence,) is the largest of all known animals either of land or sea. Before the northern whale-fisheries had reduced the number of this species, it was no very uncommon circumstance to find specimens of an hundred feet in length. These are now rarely seen, and it is not often that they are found of more than sixty feet.

In

In its general shape and appearance this animal is peculiarly uncouth; the head constituting nearly a third of the whole mass. The mouth is of prodigious amplitude; the tongue sometimes measuring eighteen or twenty feet in length. The eyes most disproportionably small. In the upper jaw is a vast number of very long horny laminæ disposed in regular series: these are popularly known by the name of whale-bone. On the top of the head is a double fistula or spout-hole, through which the enormous animal discharges the water at intervals, causing the appearance of a marine jet d'eau ascending to a great height in the air. The general colour of this species is a pale whitish ash, deeper on the back and fins, (where indeed it is nearly blackish.) Like most other animals, however, it varies in intensity of colour. Its general residence is in the northern seas, where it has long constituted the principal trade of the whale or oil fishery. Its food consists chiefly of different species of Sepiæ, Medusæ, &c.

It is to be lamented that in the poetical descriptions of various striking scenes in natural history, the epithets by which many objects are distinguished are, for want of due knowledge of the subject, improperly chosen, and utterly inconsonant with the character of the things intended; by which means the description, however beautiful in point of language, fails in point of accuracy. This is no where more strikingly illustrated than in the august lines of Milton, in which the description of a sleeping whale is injured by an epithet of all others the least according with the nature of the animal.

“ that sea-beast
Leviathan, which God of all his works

Created

Created hugest that swim th' ocean stream :
Him, haply flumb'ring on the Norway foam,
The pilot of some small night-founder'd skiff
Deeming some island, oft, as seamen tell,
With fixed anchor in his scaly rind,
Moors by his side under the lee, while night
Invests the sea, and wished morn delays."

None of the cetaceous tribe are furnished with scales, or any thing analogous to them. It must be acknowledged however that this observation may appear in no small degree hypercritical, and that Milton by the expression of *scaly rind* might only mean rough or scaly in the same sense that those epithets are applied to the bark of a tree, or any irregular surface. There can be little doubt however that real and proper scales were intended by the poet; nor is it difficult to discover the particular circumstance which impressed Milton with this erroneous idea, viz. a figure in the works of Gesner, so injudiciously expressed as to appear on a cursory view as if coated with large scales, with a vessel near it with harpooners, &c. over which is the observation of sailors often mistaking a whale for an island, and thus endangering themselves by attempting to anchor on it. As the general learning and extensive reading of our great poet are so well known, it can hardly be doubted that he was conversant with the writings of Gesner, whose work was then the great depository of natural knowledge, and that the figure and description there given left a lasting impression on his mind.

CERAMBYX LONGIMANUS.



CHARACTER GENERICUS.

Antennæ attenuatæ.

Thorax spinosus aut gibbus.

Elytra linearia.

Lin. Syst. Nat. p. 621.

CHARACTER SPECIFICUS, &c.

CERAMBYX thorace spinis mobilibus, elytris
basi unidentatis apiceque bidentatis, antennis
longis.

Lin. Syst. Nat. p. 621.

SCARABÆUS CAPRICORNUS maximus nigricans, fasciis elytrorum coccineis et flavis.

Sloan. jam. 2. p. 209.

Merian Surin. t. 28.

Aubent. Pl. Enl. 64. f. 1.

Cum ad genus *Cerambyx*, quo nescio an ullum aliud contineant Coleoptera mirabilius, numerosissimæ referantur species; perpaucae tamen sunt quæ longimanum vel magnitudine vel colorum pulchritudine possunt superare. In tabula depingitur hoc insectum magnitudine naturali. Americæ Australis est incola. Elytrorum color

color primarius est fuscus, seu potius nigricans, striis maculisque subflavis et aurantiis, et in nonnullis specimenibus, subrubris interstinctus. Caput etiam cum thorace simili modo variatur; cruraque eodem colore fasciata. Elytrorum superficies propius conspecta villo seu tomento brevissimo vestitur. Speciem hanc præcipue distinguunt crura antica ultra solitum producta; quæ tamen longiora sunt mari quam feminæ. Cerambyces, ut et alia Coleoptera, ab ovis oriuntur, larvarumque mutationes subeunt, quæ plerumque albo-flavescent, et in putridis arborum truncis potissimum degunt.







THE
LONG-LEGGED CERAMBYX.



GENERIC CHARACTER.

Antennæ attenuated.

Thorax either spinous or gibbous.

Elytra linear.

SPECIFIC CHARACTER, &c.

BLACKISH CERAMBYX with elytra fasciated
with red and yellow, with very long fore-
legs and antennæ.

NOCOONACA.

Grew. mus. p. 163. t. 13.

L'ARLEQUIN DE CAYENNE.

Pl. enl. 64. f. 1.

The genus *Cerambyx*, one of the most curious in the whole tribe of coleopterous insects, contains a prodigious number of species; many of which are extremely remarkable for the singularity of their appearance. There are however few which can exceed in this respect the species here represented, which is also one of the largest of the genus, and is highly distinguished by

by the beauty of its colours. The figure shews it of its natural size. It is a native of South America : the ground-colour of the elytra or wing-cases is a brownish black, varied with streaks and markings of pale yellow and orange, which in some specimens approaches to red. The head and thorax of the insect are also marked in the same manner, and the legs are crossed by a band of the same colours. The surface of the wing-cases, when narrowly viewed, is of a velvety appearance, or coated with a fine upright villus. This species is principally distinguished by the great length of the fore-legs, which are still longer in the male insect than the female. The *Cerambyces*, like other insects of the beetle-tribe, proceed from eggs, and pass through the state of larvæ, which are generally of a yellowish white colour, and principally reside in the decayed parts of trees.

AMPELIS GARRULUS.



CHARACTER GENERICUS.

Rostrum rectum, convexum: Mandibula superiore longiore, subincurvata, utrinque emarginata.

Lingua acuta, cartilaginea, bifida.

Lin. Syst. Nat. p. 297.

CHARACTER SPECIFICUS, &c.

AMPELIS occipite cristato, remigibus secundariis apice membranaceo colorato.

Lin. Syst. Nat. p. 297.

GARRULUS BOHEMICUS.

Gesn. av. 703.

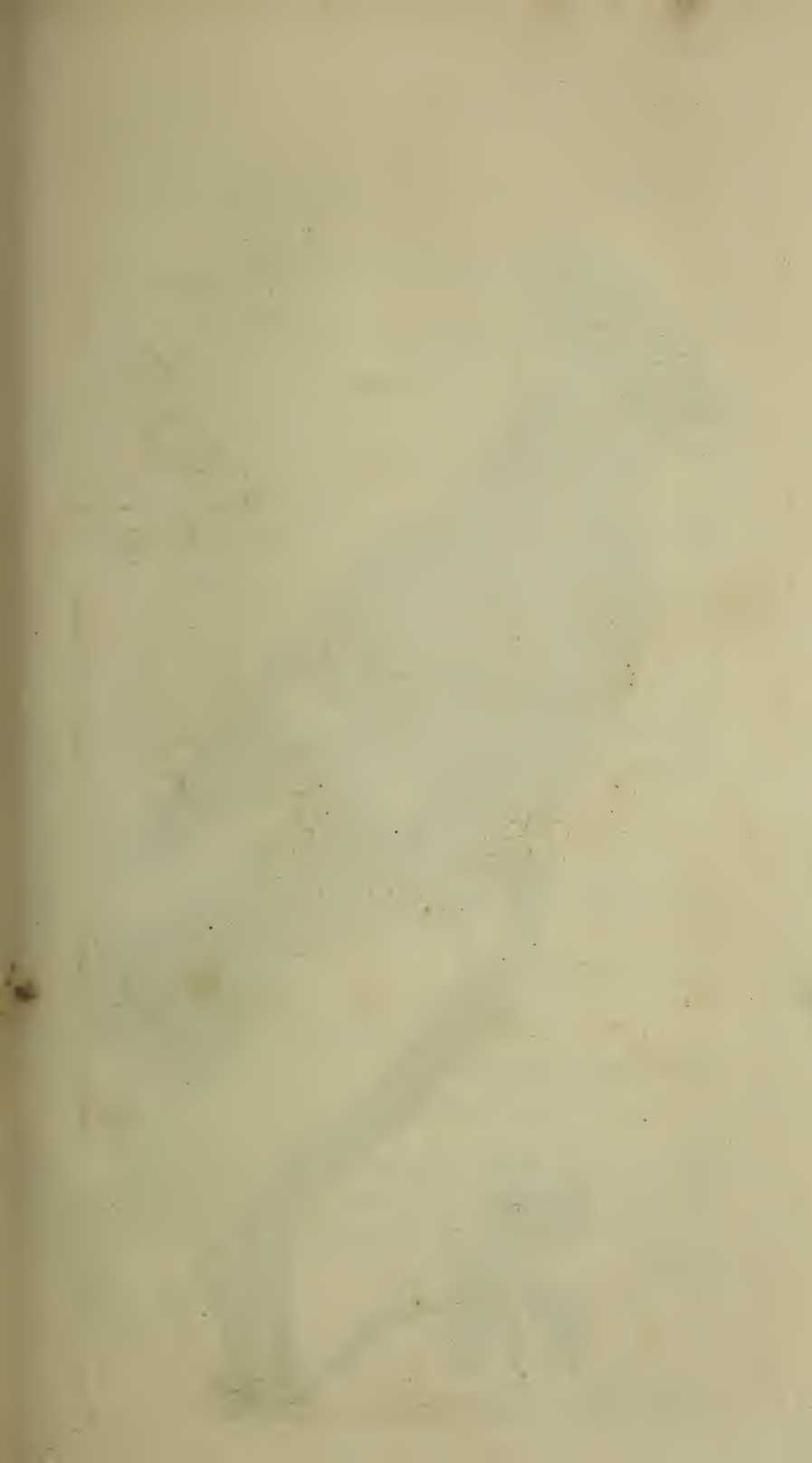
Will. orn. 90. t. 20.

LANIUS GARRULUS.

Fn. Suec. 2. n. 82.

Frequens licet reperiatur bella hæc avis in variis Europæ temperationis partibus, nos non nisi fortuita advena invisit, idque præcipue si hyems fuerit frigidior. Ingenio est vivido admodum alacrique, et ut taceam inusitatam formæ elegantiam, nota sibi fere peculiari distinguitur, cui simile vix in alia ave Europæa possit
L observari,

obſervari, remigum nempe ſecundariorum appendicibus, quæ corneæ, planæ, oblongæ, lucidæ, et ruberrimæ. Colores feminæ languidiores. Magnitudine alaudam communem paulo ſuperat Ampelis Garrulus, et fructibus baccisq̃ue præcipue veſcitur.





THE BOHEMIAN CHATTERER.



GENERIC CHARACTER.

Bill strait, a little convex above, and bending towards the point; near the end of the upper mandible a small notch on each side.

Nostrils hid in bristles.

Middle Toe closely connected at the base to the outmost.

Pennant.

SPECIFIC CHARACTER, &c.

CRESTED CHATTERER, with the secondary wing-feathers tipped by horny red appendages.

THE BOHEMIAN CHATTERER.

Will. orn. p. 132. pl. 20.

THE SILK-TAIL.

Ray. Syn. p. 85. A.

THE WAXEN CHATTERER.

Br. Zool. No. 112. pl. 48.

This beautiful bird, though common in many of the temperate parts of Europe, is but an occasional visitor in our own country, into which it sometimes mi-

grates, particularly during a severe winter. It is of a most lively and active disposition, and is distinguished, exclusive of the general elegance of its form, by a particularity scarce to be observed in any other European bird, viz. the extraordinary formation of the shorter or secondary wing-feathers, which are tipped by oblong, flat, horny appendages of a lucid surface and of a bright vermilion-colour. The colours of the female are less brilliant than those of the male. Its size is somewhat larger than that of a lark. This species feeds principally on fruits and berries.

L I M A X A T E R.



CHARACTER GENERICUS.

Corpus oblongum, repens; supra clypeo carnosio;
subtus Disco longitudinali plano.

Foramen laterale dextrum pro genitalibus et excrementis.

Tentacula quatuor, supra os.

Lin. Syst. Nat. p. 1081.

CHARACTER SPECIFICUS, &c.

LIMAX ATERRIMUS subtus pallidus.

LIMAX ATER.

List. Angl. 131.

LIMAX tota nigra.

Aldr. inf. 702.

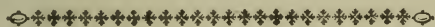
COCHLEA NUDA 3 tota nigra.

Gesn. aquat. 254.

LIMAX ATER.

Lin. Syst. Nat. p. 1081.

L I M A X M A X I M U S.



CHARACTER SPECIFICUS, &c.

LIMAX CINEREUS atro maculatus.

LIMAX MAXIMUS cinereus striatus.

List. anat. t. 3. f. 6—10.

LIMAX MAXIMUS.

Lin. Syst. Nat. p. 1081.

LIMAX CINEREUS. β .

Gmel. Syst. Nat. p. 3100.

Nudum

Nudum est genus *Limax* caretque testa. De hoc differere supervacaneum fortasse nonnullis videatur, quippe quod vulgatissimum non possit ignorari. Dignissimum tamen est genus quod speciatim describatur, cum exstet exemplum generale seu archetypum unde omnes fere testarum univalvium incolæ formantur; quorum nonnulli adeo *Limaci* similes, ut primo visu in hoc tantum differre videantur quod se ad libitum intra testam possint subducere. Exemplo sit genus *Helix* dictum, in quo nempe continentur *Helices* vulgares testaceæ. Quinimo reliquæ univalves (exceptis paucis quæ insigniter discrepant) ad genus *Limax* plus minus appropinquant. Specierum Britannicarum notiores sunt *Limax ater*, et *Limax maximus*: quorum prior aterrimo colore facillime distinguitur, in pratis et pascuis sæpissime repertus; alter rarior, fusco-pallens, non sine maculis striisque inæqualibus nigerrimis, in sylvis præcipue conspicitur, nec raro in hortis vere et autumnis: in domos etiam irrepit. Convenit utrisque de victu, foliis scilicet et radicibus plantarum. *Limax maculatus*, (ut et alii nonnulli,) acaris minimis super corpus turmatim discurrentibus, et in ipsum etiam foramen laterale thoracis irrepentibus sæpissime solet infestari. Vetat tamen torpidum ingenium, aut mucus quo obducitur corpus, ut signa det molestiæ et perturbationis, vel exeuntibus acaris, vel intrantibus.

THE
BLACK LIMAX.



GENERIC CHARACTER.

Body oblong; *Thorax* convex or shielded above,
flat beneath; with a *Foramen* on the right side.
Four *Tentacula*, situated above the mouth.

SPECIFIC CHARACTER, &c.

JET-BLACK LIMAX, pale beneath.

THE BLACK SLUG.

THE COMMON BLACK SNAIL.

THE
SPOTTED LIMAX.



SPECIFIC CHARACTER, &c.

GREYISH LIMAX, spotted with black.

THE GREAT SPOTTED SLUG.

THE SPOTTED WOOD-SNAIL.

THE SPOTTED HOUSE-SLUG, OR CEL-
LAR-SNAIL.

The genus *Limax* or *Slug*, consists of the naked or
shell-less Snails. As these animals are so very common,
it might seem almost unnecessary to introduce them
into

into a work like the present. The genus however is in reality of very great importance, since it stands, as it were, the general archetype or pattern on which the animals of almost all the univalve shells are formed: indeed so very nearly are some of them allied to this genus, that they seem, on a cursory view, to differ in scarce any other circumstance than that of being furnished with shells, into which they can at pleasure withdraw themselves. Of this the genus *Helix*, which contains the common or shell-snails, is a convincing proof. The rest of the univalves, (with a few remarkable exceptions,) are more or less similar to the genus *Limax*. Two of the most familiar species of *Limax* which this country produces are the *Limax ater* and *maximus*: the one is distinguished by its intense blackness, and is extremely common in fields and meadows; the other, less common than the former, is of a pale brown, with irregular deep-black spots and streaks: it is principally seen in woods and in garden-ground during the vernal and autumnal seasons, and not unfrequently creeps into houses. Both agree in their mode of living; feeding on the leaves and roots of vegetables. The spotted Slug, like some others of its genus, is often infested by a very small species of *acarus*, which appears in great numbers, running with much celerity over the animal, and frequently entering the lateral foramen of the body. The *Limax* however, either from its natural hebetude, or from being coated at all times by a quantity of mucus, seems to feel no particular inconvenience from these little insects, and shews no symptoms of irritation even when they are running in and out of the orifice in its side.

GRYLLUS CITRIFOLIUS.



CHARACTER GENERICUS.

Caput inflexum, maxillosum, palpis instructum.

Antennæ setaceæ s. filiformes.

Alæ quatuor, deflexæ, convolutæ: inferiores plicatæ.

Pedes postici saltatorii: *Ungues* ubique bini.

Lin. Syst. Nat. p. 692.

CHARACTER SPECIFICUS, &c.

GRYLLUS thorace tetragono angulis scabro.

Lin. Syst. Nat. p. 695.

LOCUSTA VIRIDIS.

Degeer. inf. 3. p. 437. n. 7. t. 37. f. 3.

LOCUSTA CITRIFOLIA. L: thorace tetragono angulis crenatis.

Fabr. sp. inf. 2. p. 356.

Gryllorum omnium quotquot continet genus elytris quasi foliatis distinctos, maxima fortasse est hæc species, folioque simillima. Varias Indiæ Orientalis partes incolit.

THE CITRON-LEAVED LOCUST.



GENERIC CHARACTER.

Head inflected, armed with jaws, and furnished with palpi or feelers.

Antennæ either setaceous or filiform.

Wings four, deflex, convolute: the inferior ones plaited.

Feet hinder formed for leaping: *Claws* on all the feet double.

SPECIFIC CHARACTER.

LOCUST with the thorax of a somewhat quadrangular form and crenated on the edges, with very large green leaf-like exterior wings.

Of all that tribe of the genus *Gryllus* distinguished by the leaf-like appearance of the elytra or exterior wings, this seems to be the largest species. It also yields to none in the perfect and striking resemblance to leaves which its wings exhibit. It is a native of various parts of India.



PARUS CÆRULEUS.



CHARACTER GENERICUS.

Rostrum integerrimum, basi fetis tectum.

Lingua truncata, fetis terminata.

Lin. Syst. Nat. p. 340.

CHARACTER SPECIFICUS, &c.

PARUS virescens, subtus luteus, remigibus cærulefcentibus, fronte alba, vertice cæruleo.

PARUS remigibus cærulefcentibus: primoribus margine exteriori albis, fronte alba, vertice cæruleo.

Lin. Syst. Nat. p. 341.

PARUS CÆRULEUS.

Gesn. av. 641.

Will. orn. 175.

Raj. av. 74.

Licet inter pulcherrimas avium Britannicarum merito numerari possit Parus cæruleus, detrahit tamen a pretio quotidianus conspectus. Fatendum etiam est inesse illi indolem minus aptam ad conciliandum favorem; non tantum enim gemmas arborum frugiferarum devastat,

sed et audax est ultra molem. Universo sane generi ingenium est minime mite et amabile; ferunter enim aliis avibus vim inferre et occidere cerebrum evellendo, quod solent comedere. Hoc licet frequenter fieri vix ausim dicere, a sedulis tamen historiæ naturalis indagatoribus affirmatur. Paris omnibus mira est in nidificando solertia; foecunditasque ultra fidem. Iste de quo jam loquimur nidum struit elegantem in cavis arborum, vel sub murorum summitatibus, interdum etiam in tuguriis et stabulis. Ova duodecim, quindecim, et etiam octodecim deponit; parturit tamen, ut plurimum, non nisi semel in anno.

THE BLUE TITMOUSE.



GENERIC CHARACTER.

Bill strait, a little compressed, strong, hard, and sharp-pointed.

Nostrils round, and covered with reflex bristles.

Tongue as if cut off at the end, and terminated by three or four bristles.

Toes divided to their origin; back toe large and strong.

SPECIFIC CHARACTER, &c.

GREENISH-BACKED TITMOUSE, yellow beneath, with bluish remiges, white forehead, and azure crown.

THE BLUE TITMOUSE.

Will. orn. p. 242. pl. 43.

Br. Zool. 1. No. 163. pl. 57. fig. 2.

LA MESANGE BLEUE.

Pl. enl. 3. fig. 2.

Amongst the most beautiful of the British birds may be numbered the *Parus cæruleus* or common blue Titmouse, which, from its frequent appearance, is less regarded

garded than so elegant a visitant would otherwise be. It has however some qualities which are not calculated to obtain it universal approbation ; since it is not only destructive to the young buds of fruit-trees, but has also a certain audacity in its disposition which would hardly be expected from so small a bird : indeed the manners of the Pari in general are observed to be not the most amiable, and they are accused of sometimes attacking other birds, and killing them by picking out their brains. Whether this can be considered as a frequent occurrence I cannot take upon me to determine, but it is recorded by some of the most accurate observers of Nature. The birds of this genus eminently excel in nidification, and are prolific almost beyond belief. The present species builds its curious nest in holes of trees ; under the eaves of walls, and sometimes in out-houses. It lays about twelve, fifteen, and even sometimes eighteen eggs, but seldom breeds more than once in a year.

PENNATULA RENIFORMIS.



CHARACTER GENERICUS.

Corpus in aliis pinnatum, in aliis integrum.

Stipes nudus officulo interno.

CHARACTER SPECIFICUS, &c.

PENNATULA RENIFORMIS, altero latere polypifera, stipite lumbriciformi.

Pall. el. zooph. p. 374. n. 222.

PENNATULA RENIFORMIS, stirpe lumbrici facie, altero latere polypifera.

Soland. et Ellis zooph. p. 65. n. 8.

ALCYONIUM AGARICUM.

Gmel. Syst. Nat. p. 3811.

Formosissimæ huic Pennatulæ diversa est facies a plerisque congeneribus. E stipite qui brevis vermique similis, exoritur corpus expansum, reniforme, supra foraminibus tubulatum, unde ad libitum extenduntur tentacula, seu membra hydras referentia. Color in parte superiori viget lætissime purpureus; in inferiori pallidior est, et interdum fere flavescens. In insulis Americæ variis innascitur pennatula reniformis, nec raro circa littora conspicitur.



THE
KIDNEY-SHAPED PENNATULA.



GENERIC CHARACTER.

Body in some species pinnated, in some entire ;
with polypes proceeding from its upper surface,
and having a naked stem, furnished
with an internal bone.

SPECIFIC CHARACTER, &c.

KIDNEY - SHAPED PENNATULA with
worm-like stem.

THE KIDNEY-SHAPED PURPLE SEA-
PEN.

Phil. Transf. vol. 53. t. 19. fig. 6—10.
Soland. and Ellis zooph. p. 65.

This most beautiful Pennatula is to be ranked
amongst those species which recede in point of habit
from the major part of the genus. It consists of an
expanded, kidney-shaped, flattened body, rising from
a short worm-like stem, and covered on the upper surface
with numerous tubular orifices, through which are
exserted at pleasure the tentacula or polype-formed
limbs

limbs of the animal. The colour of the upper surface is a beautiful purple; of the lower less brilliant, and sometimes yellowish. It is a native of the West-Indian Islands, where it is not uncommon.

ZEUS IMPERIALIS.



CHARACTER GENERICUS.

Caput compressum, declive: *Labium superius* membrana transversa fornicatum. *Lingua* subulata.

Membrana branchiostega radiis septem perpendicularibus: infimo transverso.

Corpus compressum.

Lin. Syst. Nat. p. 454.

CHARACTER SPECIFICUS, &c.

ZEUS cauda sublunari, corpore nunc rubente, nunc viridi, nunc purpureo, albo-guttato.

ZEUS LUNA?

Gmel. Syst. Nat. p. 1225.

POISSON DE LUNE?

Du Hamel des pêches, 3. p. 74. t. 15.

ZEUS cauda bifurca, colore argenteo purpureo splendens.

-Strom. Sondmor. 323, 325. t. 1. f. 20.

Specierum omnium, quas paucas continet genus, maximam longe et splendidissimam depinximus, reliquos sane pisces Europæos vividis coloribus vincentem; quibus nitet adeo cum recens capta fit, ut insignes ful-

gores imitando assequi incassum conetur ars pictoria. Variat præterea color primarius, qui vel ruber vel viridis aureo splendore quasi vernice obducitur. Totum corpus, excepto ventre, maculis plurimis ovatis argenteo-albis guttatum est. Pinnæ, ut plurimum, coccineæ. Cauda latissima admodum lunata. Repertus est Zeus imperialis in Europæis multis littoribus, rarius in Britannicis. Crescere solet in magnam molem, nec defuit specimen quod tres pedes longitudine, pondere centum fere libras æquaret. Notandum vero est alios plerosque pisces quos complectitur genus, modicos esse si non parvos, nitide argenteos, insignes latis corporibus, forma tenui et compressa, radiosque nonnullos pinnarum quæ in dorso caudaque, longius ultra reliquos excurrere.



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indeed be considered as the most superb of all the European fish, and when recently taken exhibits an appearance so singularly vivid as to surpass all the attempts of art to give an adequate idea of its beauty. It also varies in this respect; the predominating colour being either red or green, with a rich lustre of gold, and appearing as if varnished. The whole body, except on the belly, is sprinkled with numerous oval spots of a silvery white. The fins are commonly scarlet. The tail is very broad and strongly lunated. This most elegant fish is sometimes found on the British coast, but is more frequent on those of other parts of Europe. It grows to a very large size, having been seen of the length of three feet, and of the weight of an hundred pounds. It may not be improper to observe that most of the other fishes of the genus, except the Doree, are small species, remarkable for their shining silvery colour, the great breadth of their bodies, their thin or compressed form, and the length of some of the rays of their dorsal and caudal fins, which frequently run out far beyond the rest.

VULTUR PERCNOPTERUS.



CHARACTER GENERICUS.

Rostrum rectum, apice aduncum.

Caput impenne, antice nuda cute.

Lingua bifida.

Lin. Syst. Nat. p. 121.

CHARACTER SPECIFICUS, &c.

VULTUR remigibus nigris margine exteriori
(præter extimas) canis.

Lin. Syst. Nat. p. 123.

VULTUR (percnopterus) capite nudo, gula plu-
mosa.

Hasselq. it. 209.

FALCO MONTANUS ÆGYPTIACUS.

Hasselq. act. stockh. 1751. p. 196.

VULTUR SACER ÆGYPTIUS.

Aldr. av. 1. p. 378. t. 379.

De avidissima horum alitum voracitate copiosius dis-
ferere longum esset et supervacaneum. Norunt om-
nes inexplebilem fere esse iis cupiditatem edendi. Non

tamen inopportuno fit notare paucos præter Condoræ seu vulturem maximum Americanum, animalia viva mortuis antepone, sed cadavera diligenter quærere quæ mira narium sagacitate e longinquo sentiunt. In orientalibus regionibus variæ vulturum species exercituum motus comitantur, juxtaque fatales campos gregatim circumvolant, dapem e strage orituram avide expectantes. Longam tamen passæ esuriem, præter solitum voraces quicquid cibi fors obtulerit subito et audacter arripiunt. Narrat Dominus Bruce peregrinator celeberrimus, dum iter Abissinum perageret, et in monte qui Lanalmon dicitur, cum fociis jam jam pransurus esset, vulturem immanem e proximis rupibus magna vi in patinam infiliisse, et cum coxa armoque caprinis simul arreptis avolasse: mox reducem et plus prædæ meditantem scloppeto ab ipso interfectum fuisse. Aquilam vocat hunc alitem Dominus Bruce, sed a figura et descriptione satis patet vulturem fuisse, barbatum scilicet Linnæi, mole et gula jamdudum insignem. Non possum non suspicari Stymphalidas veterum majoribus vulturini generis speciebus originem debere. Vultur Percnopterus non tantum in calidioribus regionibus invenitur, sed et in Europa temperata. Figura hæc nostra ab ipsa ave fideliter delineata est.



THE
ALPINE VULTURE.



GENERIC CHARACTER.

Bill straight, hooked at the tip.

Head commonly bare of feathers, with a naked
skin in front.

Tongue bifid.

SPECIFIC CHARACTER, &c.

VULTURE with black remiges, hoary on the
outer edge (except the exterior ones.)

THE VULTURINE EAGLE OF ALDROVAND.

Will. orn. p. 64. t. 4.

LE VAUTOUR DES ALPES.

Bris. orn. i. p. 464. t. 4.

LE PERCNOPTERE.

Buff. ois. i. p. 149.

Pl. enl. 426.

The voracity and predacious disposition of the birds
of this tribe are too well known to require particular
description. It may be observed, however, that most
of the species prefer the flesh of dead animals to other

prey; few, except the Condor, or great South American vulture, attacking any living animals in preference, but diligently seeking for the remains of carrion, which they are enabled to perceive from a wonderful distance by their exquisite power of scent. In the Eastern climates vultures of various species never fail to attend the field of battle, eagerly hovering in multitudes at some distance, in expectation of their wished-for banquet. When pressed by hunger, they become unusually rapacious, and seize with indiscriminating haste whatever food is accessible. Thus we are assured by the celebrated Mr. Bruce, that during his Abyssinian expedition, while himself and his companions were seated on the top of the mountain Lanalmon, preparing their repast, a large vulture came from the neighbouring cliffs, and seized out of the vessel in which their meat lay, a leg and shoulder of goats flesh in its talons, and flew away with them both; and soon returning for a second booty, was shot by Mr. Bruce. From the description and figure given by that gentleman, it appears probable, that though called an Eagle, it was a species of vulture; viz. the *vultur barbatus* of Linnæus, which is one of the largest of the genus, and is a bird of great strength and vigour. It is no improbable supposition that the attacks of such birds may have afforded some foundation for the ancient fictions of the *Stymphalides*. The *vultur percnopterus* is found not only in the hotter regions of the world, but even in the temperate parts of Europe. The figure here represented was taken with great accuracy from the bird itself.

LACERTA BASILISCUS.



CHARACTER GENERICUS.

Corpus tetrapodum caudatum, nudum.

Lin. Syst. Nat. p. 359.

CHARACTER SPECIFICUS, &c.

LACERTA cauda tereti longa, pinna dorsali radiata, occipite cristato.

Lin. Syst. Nat. p. 366.

Laur. amph. p. 50. n. 75.

Seb. mus. 1. t. 100. f. 1.

Basiliscus, quem memorant antiqui animalium venenosissimum, vivit non nisi in bellis pictorum et poetarum fabulis. Omisiss aliis, Lucanum fati sit citare, qui licentia físus vere poetica describit eum ardenti in Africa horrendum sibilantem, et torvo lumine ipsum etiam serpentinum genus procul a seipso deterrentem.

“ Sibilaque effundens cunctas terrentia pestes,
Ante venena nocens, late sibi submovet omne
Vulgus, et in vacua regnat Basiliscus arena.”

Basiliscus autem, quem eo nomine norunt nunc temporis phýfici, est lacertæ species forma admodum singulari,

lari, quæque eminenter distinguitur cute velut in alæ formam expansa, per totum dorsum et maximam caudæ partem continuata, intusque radiata, qualiter fere sunt piscium pinnæ, seu ut rectius loquar, alæ *draconis* five *lacertæ volantis*; quæque inæqualiter affurgit in variis partibus, adeo ut sinuosa et denticulata videatur, et ad arbitrium vel erigitur et dilatatur, aut deprimitur et contrahitur. Occiput intus cavum quasi in cucullum seu potius in cristam extenditur. Visu licet terribilis sit Basiliscus, ingenio tamen est prorsus innocuo. Aliarum plurimarum lacertarum more, inter arbores verfatur, insectis aliisque ejusmodi victitans. Americam Australem incolit. Jamdudum in Sebæ thesauro depictus est eleganter admodum et fideliter; effecit autem forma nova et incognita (rarissima enim est species) ut a multis pro monstro imaginario haberetur. Extat tamen in Museo Britannicó specimen perfectissimum, spiritu vini conditum, quod Sebanæ figuræ veritatem abunde comprobat. Probabile porro est, immo pene certum, Linnæum, qui, testante filio, ipsum animal nunquam viderat, ab hac Sebæ figura descriptionem suam specificam condidisse. Color Basilisci pallet fusco-cinereus, corpore superiore notis seu umbris aliquot obscurioribus variato. Longitudo ei est quasi sesquipedalis. Notandum est, juniorem cutis istius quæ porrigitur super dorsum caudamque nec non cristæ quæ in occipitio affurgit, levia tantum vestigia ostendere.



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THE
BASILISK.



GENERIC CHARACTER.

Body four-footed, tailed, naked.

SPECIFIC CHARACTER, &c.

LONG-TAILED LIZARD, with radiated dorsal and caudal fin, and pointed occipital crest.

THE BASILISK.

The Basilisk of the ancients, supposed to be the most malignant of all poisonous animals, and of which the very aspect was said to be fatal, is a fabulous existence, to be found only in the representations of painters and poets. Without citing other descriptions, it may be sufficient to quote that of Lucan, who, with true poetic licence, represents the Basilisk exerting his terrific glance in the burning deserts of Africa, and obliging the rest of the poisonous tribe to preserve an humble distance.

“ Sibilaque effundens cunctas terrentia pestes,
Ante venena nocens, late sibi submovet omne
Vulgus, et in vacua regnat Basiliscus arena.”

But

But fiercely hissing, thro' the poison'd air
The Basilisk exerts his deathful glare :
At distance bids each vulgar pest remain,
And reigns sole monarch of his fultry plain.

But the animal known in modern natural history by this name is a species of lizard, of a very singular shape, and which is particularly distinguished by a long and broad wing-like process or expansion continued along the whole length of the back, and to a very considerable distance on the upper part of the tail, and furnished at certain distances with internal radii analogous to those in the fins of fishes, or still more so to those in the wings of the draco volans or flying lizard. This process is of different elevation in different parts, so as to appear strongly sinuated and indented, and is capable of being either dilated or contracted at the pleasure of the animal. The occiput or hind part of the head is elevated into a very conspicuous pointed hood or hollow crest. Notwithstanding its formidable appearance the Basilisk is a perfectly harmless animal, and like many other of the lizard tribe, resides principally amongst trees, where it feeds on insects, &c. It is a native of South America. It has long ago been admirably figured by Seba, and as it is an extremely rare species, has sometimes been considered, (from the strangeness of its form) as a fictitious representation. There is however in the British Museum a very fine specimen, well preserved in spirits, and which fully confirms the excellency of Seba's figure; from which, in all probability, Linnæus himself, (who never saw the animal,) took his specific description.

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The colour of the Basilisk is a pale cinereous brown, with some darker variegations towards the upper part of the body. Its length is about a foot and half. The young or small specimens have but a slight appearance either of the dorsal or caudal process, or of the pointed occipital crest.

P E S D I D I.



EX PEDE HERCULEM!

Didum ineptum Linnæi, miram scilicet et anomalam avem, in priore numero hujus operis fideliter ad exemplar archetypum depictam descripsi. At de vera avis existentia a multis semper dubitatum est, eoque magis quod adhuc credi solitum est nulla ejus in museis Europæis reperiri posse vestigia. Dum autem in miscellaneam farraginem et quisquiliis Musei Britannici nuperime obiter inspieiebam, comite ingenioso pictore domino Reinagle juniore, fauste admodum se oculis obtulit pes adeo insolitus ut primo visu Didi pedem nobis illico in mentem revocaverit. Examinato dehinc ulterius specimine, verum esse et genuinum Didi pedem satis constabat. Dubium autem omne sustulit Grewii descriptio in opere quod dicitur “ Museum Regalis “ Societatis,” cui eum plene et ad amussim respondere sensi. Figuræ igitur, quæ juxta naturam depingitur, adjunxi etiam descriptionem quæ apud Grewium legitur, occasionem avide arripiens rem rarissimam diuque desideratam lectoribus proponendi.

“ Qui ibi asservatur pes squamis flavo rubescentibus
“ contegitur, et longitudine paululum superat quan-
“ tuor uncias, latitudine quinque, saltem circa arti-
“ culos; et licet minor sit pede struthionis et casuarii,
“ forsan tamen fere æquali sit robore, si ratio habeatur
“ brevitatis.”



THE LEG OF A DODO.



In a preceding number of the present work I have given a description, accompanied by a figure accurately copied from an original picture said to have been taken from nature, of that most singular bird called the Dodo: an animal so very rare, and of an appearance so uncouth, as to have given rise to some doubts as to its real existence; which was also rendered still more suspicious from the supposed want of any remains of the bird itself in the museums of Europe. A very short time since however, on cursorily examining several miscellaneous articles in one of the apartments of the British Museum, in company with that very ingenious artist Mr. Reinagle jun^r, we had the good fortune to discover a leg, which even at first view appeared of so peculiar an aspect that it instantly suggested the idea of the bird in question. On farther examination it was still less to be doubted that it must really have belonged to that curious bird; and on collating it with the description given by Grew in his *Museum Regalis Societatis*, it agreed in all points with the measurements there particularized. I therefore accompany the figure, here given, which is represented of the natural size, with the description from the above work of Grew, and it is with peculiar pleasure that I embrace the opportunity of presenting my readers with so interesting a curiosity.

“ The

“ The leg here preserved is covered with a reddish
“ yellow scale. Not much above four inches long;
“ yet above five in thickness, or round about the
“ joints: wherein though it be inferior to that of an
“ Ostrich or Cassoary, yet joined with its shortness,
“ may render it of almost equal strength.”

TESTUDO MELEAGRIS.



CHARACTER GENERICUS.

Corpus tetrapodum, caudatum, testa obtectum.

Os mandibulis nudis, edentulis.

Lin. Syst. Nat. p. 350.

CHARACTER SPECIFICUS.

TESTUDO pedibus subpalmatis? testa ovata glabra maculis innumeris flavis guttata.

Plurimas testudinum species sibi invicem nimis affines accurate dignoscere difficillimum est. De aliis ne dubitari quidem possit, quippe quæ notas gerant conspicuas et insignes ad distinctionem: qualis scilicet est testudo geometrica, quam striarum flavarum super scutum bella et ordinata serie vel tiro statim agnoverit. Illam etiam quam describere pergimus a reliquo genere fati sejungit notabilis characterum et colorum dispositio. Longa est, ut plurimum, quinque vel sex uncias. Color fusco-castaneus saturatior per totum corpus superius guttulis ovatis albido-flavescentibus pulcherrime aspergitur, in singula tegminis divisione quasi ducenis. Scutum læve est, carens fulcis et prominentiis, nisi quod per medium trium præcipuarum divisionum excurrat carina paululum levata, quæ tamen in nonnullis speci-

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minibus

minibus obscurius cernitur. Lævis etiam est margo scuti, seu ex partibus constans una serie continuatis, non inæqualiter ferratis, sed figuram prope ellipticam toto ambitu efficientibus. Superficies inferior flavescit maculis aliquot fuscis et inæqualibus notata. Caput modicum. Oculi magni. Pedes iis similes quos habent reliquæ testudines terrestres et fluviatiles, unguibus muniuntur validis. Cauda longula et squamosa. Si super fundum nigriorem confluerint inter se maculæ, quod rarius evenit, perit magna ex parte pulchritudo testudinis meleagridis. In America præcipue innascitur.



London. Published July 1873, by J. L. Waller & Co. No. 15, Broad Street.

THE SPECKLED TORTOISE.



GENERIC CHARACTER.

Body four-footed, tailed, covered with a shell.

Mouth consisting of naked toothless mandibles.

SPECIFIC CHARACTER, &c.

TORTOISE with subpalmated? feet, and ovate smooth shell speckled with innumerable yellow dots.

LA JAUNE.

Cepede Hist. Nat. des quadr. ovip. 1.
p. 135. t. 6.

So great is the similarity between several of the tortoise tribe, that it is by no means easy to distinguish with accuracy the particular species. Some however are so strongly characterized as to be at all times readily ascertained. Thus the *Testudo geometrica* or striped Tortoise is so strikingly distinguished by the beautiful and regular disposition of the yellow marks on its shield, as to be instantly recognised by any one in the least conversant with this genus. The species here represented is also, in general, so remarkable in its appearance as

to be immediately known from any other kind. Its usual length is about five or six inches: its colour a deep chestnut-brown, most elegantly marked over the whole upper surface with innumerable oval specks of yellowish white. There are scarce less than 150 or 200 of these specks on each division of the shield. The whole is smooth, or undistinguished by any furrows or risings on the divisions, except that down the middle of the three chief or central pieces runs an elevated or projecting carina as it were, which is much less distinct in some specimens than in others. The edge or outline of the shell is smooth, or composed of pieces which do not project unequally, but form one continued, nearly elliptic figure. The lower surface is pale yellowish, with a few irregular patches of brown. The head is moderately large. The eyes large. The feet of the usual structure in other land and fresh-water tortoises, and furnished with strong claws. The tail longish and scaly. It sometimes happens that the beautiful appearance which generally distinguishes this species, is nearly lost, or at least greatly obliterated, by the dark ground-colour predominating too much, and the spots becoming confluent. This however is not often the case. It is a native of America.

DORIS ARGO.



CHARACTER GENERICUS.

Corpus repens, oblongum, fubtus planum.

Os antice fubtus.

Anus poſtice, ſupra cinctus ciliis.

Tentacula duo, ſupra corpus antice, intra foramina retractilia.

CHARACTER SPECIFICUS, &c.

DORIS OVALIS, corpore lævi, tentaculis duobus ad os, ano ciliato phrygio.

Lin. Syſt. Nat. p. 1083.

ARGO.

Bohadsch. mar. 65. t. 5. f. 45.

LEPUS MARINUS alter major.

Column. ecphr. t. 32.

Plurima quæ hoc genus amplectitur animalia limacibus valde affinia omnino in mari degunt. Oftendit tabula ſpecierum Europæarum maximam et formoſiſſimam. Color variat: interdum ſcilicet flavus eſt, plus minusve ſaturatus; interdum aurantius, ſeu etiam coccineus. In multis Britanniæ littoribus non raro conſpicitur *Doris Argo*.

THE LEMON DORIS.



GENERIC CHARACTER.

Body repent, oblong, flat beneath.

Mouth placed below, toward the anterior end.

Vent behind, furrounded above by a fringe.

Tentacula two, seated on the upper part of the body in front, retractile.

SPECIFIC CHARACTER, &c.

OVAL DORIS with smooth body; the vent furrounded by a ramified fringe.

LEMON DORIS.

Pennant Brit. Zool. 4. p. 36.

THE SEA-LEMON.

The animals of this genus are greatly allied to those of the genus *Limax*, but are entirely marine. The species of *Doris* are numerous. The largest as well as the most elegant of the European kinds is that figured on the annexed plate. In colour it varies much; being sometimes of a yellow, more or less deep, and sometimes of a bright orange, or even scarlet. It is not unfrequently found on several parts of the coasts of Britain.



SPONGIA INFUNDIBULUM.



CHARACTER GENERICUS.

Animal? fixum, flexile, polymorphum, torpidissimum, contextum vel e fibris reticulatis, vel e spinulis gelatina viva vestitis;

Osculis seu foraminibus superficiei aquam respirantibus.

Soland. et Ellis zooph. p. 182.

CHARACTER SPECIFICUS, &c.

SPONGIA infundibuliformis turbinata flexilis.

Lin. Syst. Nat. p. 1296:

SPONGIA forma infundibuli.

C. Baub. pin. p. 369.

J. Baub. hist. pl. 3. p. 816.

SPONGIA foliata aspera et Spongia infundibuliformis.

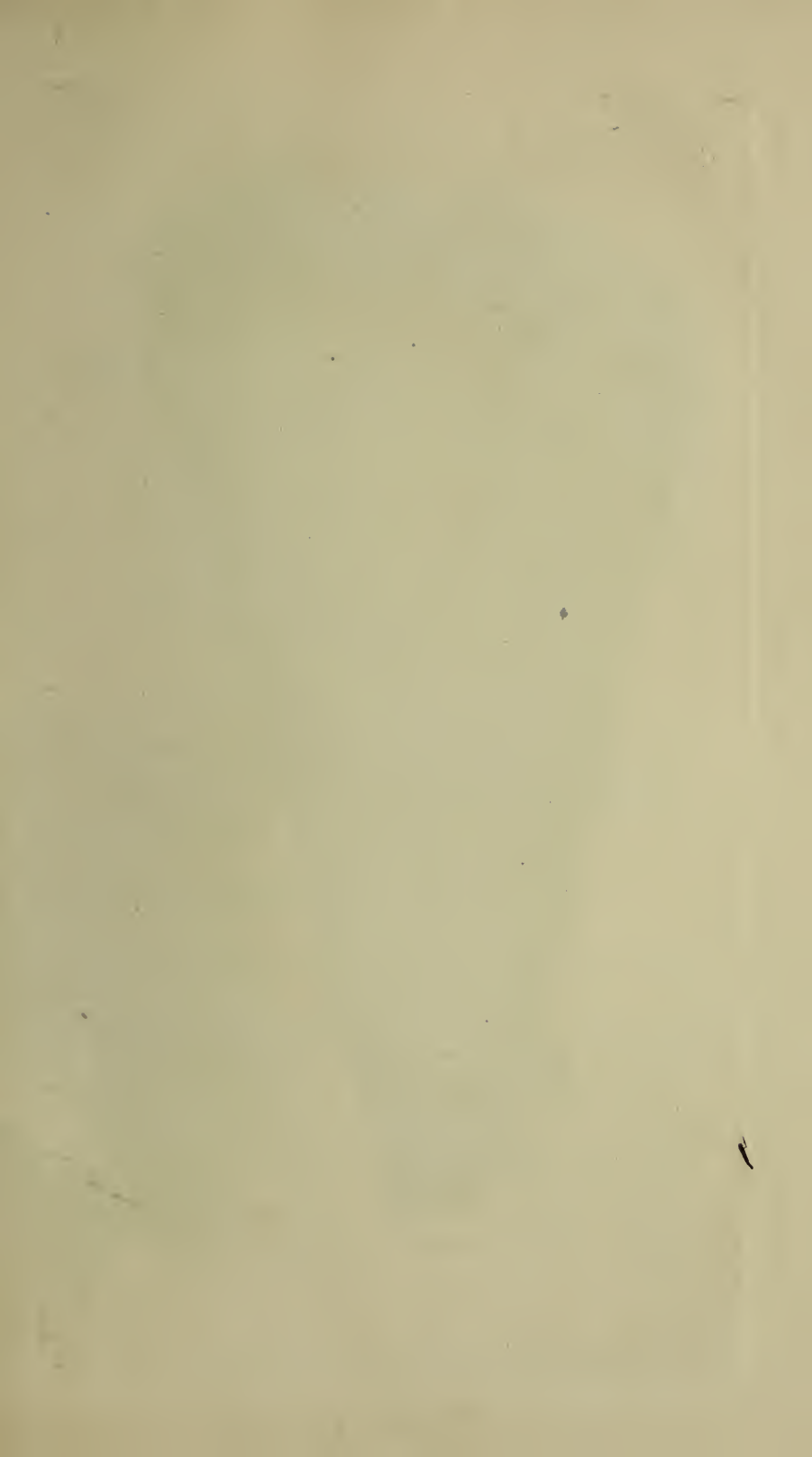
Petiv. peregr. t. 9. f. 4. 6.

SPONGIA (crateriformis) infundibuliformis molliuscula, membranaceo-cellulosa, extus villosa crassior.

Pall. el. zooph. p. 386. n. 233.

De spongiarum natura, mira certe et ambigua, diu patuit philosophis amplius disputandi campus. Crediderunt

derunt nonnulli satis inepte, quæque opinio nunc penitus abolevit, esse eas vermium quorundam opus qui in cavitatibus pererrantes reperiuntur. Alii mera esse vegetabilia putarunt. Inesse autem iis vim vitæ ex hoc satis constat, quod in aquis natalibus attrectatæ a tactu paululum refugiant, quodque quiescentes poros alternatim contrahant et dilatent. Ut verbo dicam, constant spongiæ e ramosissima tuborum capillaceorum copia, facultatem quandam contractationis habentium: horum ope nutrimentum ex aquis in quibus crescunt absorbentes. Iis igitur utpote *zoophytorum* omnium inertissimis seponendus est locus proprius et ab aliis separatus. Facie inter se plurimum differunt. Aliæ scilicet *amorphæ*, seu figura carentes certa et constanti, ut spongia *officinalis* vel vulgaris. Aliæ cyathi instar formatæ. Aliæ tubulatæ; aliæ multiformes; aliæ denique ramosæ et etiam reticulatæ ad similitudinem quodammodo accedunt Gorgoniæ, seu Flabelli Veneris. Species, quam pro exemplo depinximus, maris Mediterranei et Indici rupibus, more reliqui generis, adhæret. Magnitudine variat. Habet nempe interdum diametros pedem, ad minimum, interdum paucas tantum uncias. Color ejus leviter fuscus, et substantia minus tenax quam spongiæ vulgaris, quæ et *officinalis* dicitur.





FUNNEL SPONGE.



GENERIC CHARACTER.

Animal? fixed, flexible, torpid, of various forms; composed either of reticulated fibres, or masses of small spines interwoven together; clothed with a living? gelatinous flesh full of small mouths or foramina on its surface, by which it sucks in and throws out the water.

SPECIFIC CHARACTER, &c.

FUNNEL-SHAPED FLEXILE SPONGE with
surface more or less irregular or roughened;

CUP SPONGE.

FUNNEL SPONGE.

Sponges have afforded a field of controversy for philosophical observers, and may be numbered amongst the most obscure or doubtful productions of nature. By some they have been supposed the fabric of certain worms allied to *Terebellæ*, which are often found straying about in their cavities: an idea not very probable, and which is now sufficiently exploded. Others

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have

have imagined them to be mere vegetables; but that they are really possessed of a living principle is evident from the circumstance of their alternately contracting and dilating their pores, and shrinking in some degree from the touch when examined in their native waters. In short, sponges consist of an infinitely ramified mass of capillary tubes, possessed of a certain degree of contractile power, and capable from their structure, of absorbing nutriment from the surrounding fluid in which they are by nature immersed. They therefore form an animal tribe different from all others, and may be considered as the most torpid of all Zoophytes. The different species of Sponge differ greatly in appearance from each other: some being amorphous, or of no regular shape, as the common or officinal sponge: others cyathiform or cup-shaped: others tubular, and of various forms; and some are ramified and reticulated in such a manner as to bear a considerable resemblance to the sea-fan or *Gorgonia Flabellum* of Linnæus. The species here exhibited, as an example of the genus, is found both in the Mediterranean and Indian seas; adhering, like others of its genus, to rocks. In size it varies from a few inches in diameter to that of a foot or more. Its colour is a pale brown, and its substance less strong or tenacious than that of the common or officinal species.

I N D E X.

- PL. **A**CARUS auratus.
 128. Alcedo Ispida.
 129. Ampelis Garrulus.
 135. Balæna Mysticetus.
 133. Cerambyx longimanus.
 122. Coluber Cerastes.
 117. Crax Alektor.
 123. Didus ineptus.
 145. Doris Argo.
 121. Gordius aquaticus.
 115. Gryllus laurifolius.
 136. Gryllus citrifolius.
 130. Gymnotus electricus.
 142. Lacerta Basiliscus.
 137. Limax ater & max'.
 119. Mantis ficcifolia.
 118. Madrepora Cerebrum.
 112. Medusa Infundibulum
 114. Motacilla hirundinacea
 138. Parus cæruleus.
 143. Pes Didi.
 113. Papilio Nestor.
 125. Papilio Ripheus.
 124. Pennatula argentea.
 139. Pennatula reniformis.
 126. Picus erythrocephalus.
 111. Pipra punctata.
 132. Plittacus melanopterus.
 127. Rana arborea.
 131. Scarabæus Midas.
 146. Spongia Infundibulum.
 120. Tantalus ruber.
 144. Testudo Meleagris.
 116. Trigla cataphracta.
 141. Vultur Percnopterus.
 140. Zeus imperialis.

I N D E X.

- PL. **A**CARUS gold-spotted
 128. Basilisk.
 142. Beetle Midas.
 131. Butterfly Nestor.
 113. Butterfly Ripheus.
 125. Cerambyx long-legged.
 134. Chatterer Bohemian.
 135. Curassô common.
 117. Dodo.
 123. Dodo leg.
 143. Doris Lemon.
 127. Frog tree.
 116. Gurnard mailed.
 130. Gymnotus electrical.
 121. Hair-worm.
 120. Ibis scarlet.
 129. Kingfisher common.
 115. Locust bay-leaved.
 136. Locust citron-leaved.
 118. Madrepore Brain.
 111. Manakin speckled.
 119. Mantis dry-leaf.
 112. Medusa Funnel.
 140. Opah, or imperial Zeus.
 132. Parrakeet black-winged.
 124. Pennatula silver.
 139. Pennatula kidney-shaped.
 137. Slug black, and spotted.
 146. Sponge Funnel.
 138. Titmouse blue.
 144. Tortoise speckled.
 122. Viper horned.
 141. Vulture Alpine.
 114. Warbler Swallow.
 126. Woodpecker red-headed.
 133. Whale great Northern.







